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Gaban, Boni Thadius, Ph.D.

Andrews University, 1992

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Andrews University

School of Education

DEVELOPING A MODEL FOR THE ORGANIZATION,  
ADMINISTRATION, AND PROGRAMS FOR  
COMMUNITY COLLEGES IN MALAYSIA

A Dissertation

Presented in Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

by

Boni Thadius Gaban

July 1992

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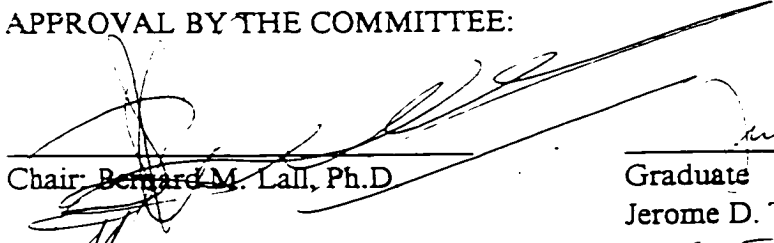
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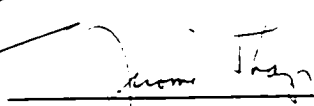
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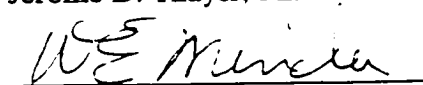
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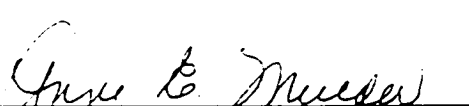
  
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**ABSTRACT**

**DEVELOPING A MODEL FOR THE ORGANIZATION,  
ADMINISTRATION, AND PROGRAMS FOR  
COMMUNITY COLLEGES IN MALAYSIA**

by

**Boni Thadius Gaban**

Chair: Bernard M. Lall, Ph.D.

## ABSTRACT OF GRADUATE STUDENT RESEARCH

Dissertation

Andrews University

School of Education

Title:       DEVELOPING A MODEL FOR THE ORGANIZATION,  
ADMINISTRATION, AND PROGRAMS FOR  
COMMUNITY COLLEGES IN MALAYSIA

Name of researcher: Boni Thadius Gaban

Name and degree of faculty chair: Bernard M. Lall, Ph.D.

Date completed: July 1992

### **Problem**

The large number of Malaysian students studying overseas indicates that there is a paucity of extant institutions of higher learning in Malaysia to cater to the increasing number of secondary school graduates. It was therefore the purpose of this study to develop a model for the organization, administration, and programs for community colleges in Malaysia.

## **Method**

Documentary and survey methodology was used. This study covered the philosophy, purposes, organizational structures, personnel, programs, and roles for community colleges in Malaysia. From the review of related literature, interviews with administrators of community colleges in the United States, and the survey to assess the need for the community college system in Malaysia, a model for the organization, administration, and programs for community colleges in Malaysia was developed.

## **Results**

The results of the survey indicated that approximately 90% of the selected Malaysian educators, politicians, and businessmen agreed or strongly agreed that community colleges are useful for Malaysia because they: (1) offer educational opportunities to disadvantaged secondary school graduates, (2) provide occupational skills in semi-professional fields, (3) serve as stepping stones for motivated students to continue their education in universities, (4) meet the needs for skilled manpower in business, industry and other professions, (5) cater to the educational needs of secondary school graduates, (6) meet the educational needs of working adults to attain specific qualifications for career advancement and change, (7) contribute to the intellectual and cultural activities of their communities, and (8) prepare students to assume responsible roles as citizens.



## Conclusions

From this study, it was concluded that there is a need to expand the institutions of higher learning in Malaysia to cater to the increasing number of secondary school graduates and meet the growing demands of business and industry for skilled manpower.

The following recommendations are presented for consideration:

1. That the Malaysian government establish a department under the Ministry of Education to organize, administer, and implement programs for community colleges
2. That residential facilities and programs be considered in the development of community colleges in Malaysia
3. That organizational and administrative structure be developed
4. That educational programs and services be developed bearing in mind the local conditions
5. That the role of the community colleges as feeder institutions be considered
6. That the role of the community colleges in building communities be included
7. That the planning for the college facilities be considered and studied
8. That a strong funding program for the community colleges be developed as Malaysia moves toward 2020.

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## CHAPTER I

### NATURE AND PURPOSE OF THE STUDY

#### Introduction

Malaysia is situated in southeast Asia. It covers an area of 329,758 square kilometers (127,320 square miles) and has a population of about 17 million (Europa World Yearbook, 1990). Peninsular Malaysia, which is located between the southern tip of Thailand and north of Singapore, is made up of 11 states. It was formerly known as Malaya which gained independence from British colonial rule on August 31, 1957. On September 16, 1963, Sabah and Sarawak gained their independence from the British and joined the federation of Malaysia.

The people of Malaysia are multiethnic and comprise three main racial groups: (1) the Bumiputera, native Malaysians, consisting of Malays, Ibans, Kadazans, and other smaller indigenous groups; (2) the Chinese, and (3) the Indians, who had settled in Malaysia over the centuries. The latter two groups are also composed of various subgroups. The Chinese are made up of those who speak several dialects of Cantonese, Hakka, Teochew, Hainanese, and others. The Indians consist of Tamils,

Telegu, Gujeratis, Punjabis, Bengalis, and others (Wong & Gwee, 1972).

During British colonial rule, the Bumiputera were mainly farmers and fishermen. The Chinese were the businessmen, traders, middlemen, and bankers. The nature of the societal structure of Malaysia had contributed toward the disparity in the socioeconomic and educational development of its people. Most of those attending schools were Chinese because the Chinese were concentrated mainly in the towns, had easy access to schools, and had the financial means to send their children to school. The Bumiputera were found mainly in the rural areas and coastal waters, with no access to schools. Hence their educational attainment was considerably below the levels attained by Chinese and Indians (Hirschman, 1985).

This structure changed slightly as the Bumiputera became more literate and nationalistic. Since their independence, they had managed to consolidate themselves and maintained the government structure both at the state and federal levels. However, the Chinese had maintained their dominance of the commerce in the country. In general, Malaysia had invested its resources toward improving its socioeconomic and educational conditions.

Malaysia made education a key government priority. The government saw that education was not only an "important investment for socioeconomic development but also as a means to unify its multiethnic society" (Hirschman, 1985, P. 118). Thus,

Malaysia had embarked on expanding its schools in the country. In the 1960s and 1970s, educational expansion in Malaysia was extensive. Enrollment in all primary schools in Peninsular Malaysia in 1938 was slightly over 200,000. By 1947, it had risen to 450,000 and since then it had almost doubled by 1956. By 1981, Malaysia had over 3 million students. At the same time, secondary schools in Peninsular Malaysia had also expanded from 17,000 students in 1947 to 90,000 in 1956. By 1974, students numbered 706,000 (Hirschnman, 1985).

Malaysia's higher education also expanded from one university in 1949 to four new universities by the early 1970s. A degree granting college, the Institute of Technology MARA, was also established in the late 1960s. The number of students in the degree-granting institutions jumped from 7,677 in 1970 to 20,704 in 1980. By 1988, Malaysia had seven universities with a total enrollment of 47,946. In the same year, the number of students attending secondary school was 1,359,579 (Europa World Yearbook, 1990).

The growing demand for higher education in Malaysia had exceeded the capacity of its existing institutions. The government estimated that about 52,000 Malaysian students, at all levels, were studying overseas in 1990 (Sixth Malaysia Plan 1991-1995).

The large number of Malaysian students overseas indicated that there was a paucity of extant institutions of higher learning in Malaysia to cater to the increasing secondary school graduates. The financially able usually sent their children overseas for further education.

Government leaders in Malaysia were aware of the importance of using education to develop their human resources. In the First Malaysia Plan 1966-1970, the main economic goals were:

1. To stimulate new kinds of economic activity, both agricultural and industrial, so as to reduce the nation's dependence on rubber and tin;
2. To educate and train Malaysians from all walks of life in order to equip them for effective participation in the process of economic and social development; and
3. To generate employment opportunities at a rate sufficient to provide productive work for new entrants to the labor force and lower the rate of unemployment. (cited in Wong & Gwee, 1972, p. 128)

The eradication of imbalances between the various races in Malaysia was the general objective of government policy. This was the thrust of the Second Five Year Plan that began in 1971. This policy was to be implemented at all social, economic, and income levels. The second Prime Minister of Malaysia, Tun Abdul Razak, stressed that

we must do what we can to help the depressed sections of all communities because we believe that unless these imbalances are corrected and quickly too, we will not be able to achieve the national unity which we cherish so much and which is essential to our continued existence as a people and nation. (cited in Wong & Gwee, 1972, p. 154)

Wong and Gwee (1972) pointed out that one of the main causes of economic backwardness among the Bumiputera in Malaysia "was due to the lack of educational opportunities" (p. 154).

Malaysia's recent National Development Policy 1991-2000 stressed the need and importance of human resource development. They stated:

During the decade of the nineties, human resource development will assume new importance. Competitiveness, productivity, innovativeness and capability in management of new technologies in Malaysia will be determined by the quality of its human resources. A productive and efficient labour force must be developed with strong ethical and moral values and a commitment to excellence . . . . Human resource development must contain policies and programmes to continuously upgrade and improve the education and training programmes and facilities to meet the changing skill requirements. The Government will give high priority towards human resource development in the allocation of expenditures under the public sector programme. (pp. 25-26)

Their goal is the "development of increased capability of Malaysians . . . to stay ahead and maintain its competitive edge and thereby achieve the goal of becoming a fully developed nation by the year 2020" (p. 157).

In their Sixth Malaysia Plan 1991-1995, Malaysia emphasized the importance of human resource development to meet the "increasing demand for skills arising from rapid industrial growth" (p. 146). They also encouraged the private sector to "train their employees to meet the skill requirement of the manufacturing sector" (p. 147).



The Sixth Malaysia Plan 1991-1995 also pointed out the importance and need for better education and training systems in the country. It stipulated that:

The education and training systems will be further expanded and strengthened to achieve its objectives of ensuring that quality education and training is accessible to all Malaysians. The education and training systems will continue to be geared to mould individuals to become better Malaysians with the right attitude towards life and work, and to equip them with the knowledge and skills necessary to make Malaysia a developed nation by the year 2020. (p. 170)

It indicated that educational programs will be intensified and made accessible and more equitable so that national unity and integration can be achieved. Various programs and projects that will fully benefit the rural population and the disadvantaged group will be accentuated. Improvement on the quality of education and training will be made and oriented towards meeting the needs of national development.

Padman (1991, p. 8) reported that due to "skills shortage arising from the explosive growth of the manufacturing sector," Malaysia had made solving this problem a "top priority." Stressing this problem, Datuk Dr. Sulaiman Haji Daud, Education Minister, (cited in Padman, 1991, p. 8) stated that "without an educated, skilled and motivated labor force which takes advantage of modern technology, productivity will suffer and the country's ability to compete in the global economy will be undermined."

Thus, the role of redressing the economic and social imbalance among the various disadvantaged groups, and the importance of education, training, and human resource development in meeting the increasing demand for skilled manpower in Malaysia cannot be overemphasized.

### Statement of the Problem

Educational institutions in Malaysia have expanded greatly since independence. However, because of the limited capacity of its institutions of higher learning, a large number of Malaysian students are pursuing their higher education overseas. Those who were financially disadvantaged had to settle with the conditions of post-secondary-school life. The paucity of job opportunities for the unskilled had compounded these students' problems. This is a problem of such magnitude that, if not redressed adequately, will eventually prove to be counter-productive to (1) the country's aspiration for a stable and harmonious socioeconomic development, (2) its efforts to improve its standard of living, (3) its task of meeting the shortage of skilled manpower in the country, and (4) its goal of becoming a fully developed nation by the end of this decade. The problem is: How can the educational needs of these disadvantaged students be met? How can Malaysia be more effective in meeting the country's growing need for skilled manpower?

### Purpose of the Study

Malaysia recognizes that education is a key element in achieving its economic goals of eradicating poverty, raising the standard of living of the people, maintaining a stable and harmonious socio-economic development for its people, meeting the shortage of skilled manpower, attaining national unity, and becoming a fully developed nation by the year 2020. It is also universally recognized that community colleges play an important role in the educational, cultural, social, and economic development of a country. Ever since the community college movement was formally introduced in the United States in 1902, it has increased greatly and spread to other nations. Many advanced countries, as well as developing countries, have established community colleges.

Community colleges could play a vital role in enhancing educational development in Malaysia. As there are no community colleges in Malaysia, it was the purpose of this study to develop a model for the organization, administration, and programs for community colleges in Malaysia so as to provide a viable solution to meet the growing needs for higher education in Malaysia. This study also attempted to assess the need for the community college system in Malaysia and the course programs that are needed as perceived by selected Malaysian educators, politicians and businessmen.

### Questions for Consideration

In meeting the purposes of this study, the findings were directed toward answering the following questions related to the establishment, administration, and programs of community colleges:

1. What are the characteristics of a community college in the United States?
2. What are the purposes and functions of a community college in the United States?
3. What are the organizational and administrative structures and tasks of community colleges in the United States?
4. What are the programs and services of a community college in the United States?
5. Is there a need for a community college system in Malaysia?
6. What should be the programs of the community colleges in Malaysia?

### Need for the Study

As educational development is a key government priority in Malaysia and because community colleges can play a vital role in this endeavor, the need for this study cannot be overemphasized. The growing number of students attending schools and institutions of higher learning in Malaysia indicate the great demand for education.

Hence, the significance of this study is apparent.

In the United States, Bender (1980), Evans and Neagley (1973), Fields (1962), Foresi, Jr. (1974), Garms (1977), Gleazer, Jr. (1968), Hillway (1958), Medsker and Tillery (1971), Monroe, (1972), O'Connell (1968), Richardson, Jr., Blocker and Bender (1972), Starrak and Hughes (1954), Thornton, Jr. (1972), Vaughan (1986), published books, and Alfred (1985), Bensiman (1985), Brunner (1956), Bryant (1988), Deegan (1985), Ferguson (1981), Giles (1986), Gollattscheck (1985), Heidenreich (1974), Keene (1964), Kintzer (1980), Landrith (1971), Lewis (1989), McDowell (1985), Plucker (1987), O'Hara (1990), Reyes and Twombly (1969), Silverman (1987), Smith (1986), and Wimmer (1971) conducted studies in which they provided information on community colleges and how to administer them. In Malaysia, there are no community colleges and, as such, no information pertaining to them is available. This study could serve as a guide for future establishment of community colleges in Malaysia in that it proposes a model for the organization, administration, and programs for community colleges in Malaysia.

### Definition of Terms

The following definitions may serve to clarify major terms used in this study:

Administration: The American Association of School Administrators defined administration as the "total of the processes through which appropriate human

and material resources are made available and made effective for accomplishing the purposes of an enterprise" (Campbell & Gregg, 1957, p. 270).

Bumiputera: Natives of Malaysia comprising Malay, Iban, Kadazan, and other smaller indigenous groups.

Community College: It is a 2-year institution of higher learning. It is multipurpose, providing comprehensive educational programs and services such as preparation for advanced study (transfer), occupational education, general education, and community services--continuing education and outreach training programs. It is accessible to all qualified students, and has an open-door policy on admission. Its tuition fees are low. It serves all the citizens of its community.

Educators: Secondary school principals, education officers, university professors and college presidents.

Formal Education: "Connotes age-specific, full-time classroom attendance in a linear graded system geared to certificates, diplomas, degrees, or other formal credentials" (Harbison, 1973, p. 52).

Formal Organization: "A system of consciously coordinated activities or forces of two or more persons" (Barnard, 1938, p. 81).

Human Resources: "The energies, skills, talents, and knowledge of people which are, or which potentially can or should be, applied to the production of goods or the rendering of useful services" (Harbison, 1973, p. 3).

Human Resource Development: The "process of increasing the knowledge, the skills, and the capacities of all the people in a society" (Harbison & Myers, 1964, p. 2).

In-House Training Program: Training programs conducted internally by the employer.

Junior College: "Is a rather general one, commonly and rather loosely employed to designate a variety of educational institutions offering two years of collegiate instructions beyond the high school" (Starrak & Hughes, 1954, p. 23).

Model: "Is an agreed upon symbol, a replica; it has been described as providing an habitual form of thinking and an economy in thinking" (McGrath, 1970, p. 28).

New Economic Policy: Proclaimed in the Second Malaysia Plan, 1971-1975, it sought to correct economic disparities between the races by expanding Bumiputera participation in the modern commercial and industrial sectors. Its other objective for national unity was to eradicate poverty among all races (Anand, 1983).

Non-Formal Education and Training: "Skills and knowledge generation taking place outside the formal schooling system, is a heterogenous conglomeration of unstandardized and seemingly unrelated activities aimed at a wide variety of goals" (Harbison, 1973, p. 52).

Pacific Rim: Refers to the Asia Pacific Rim that stretches from Japan to Southeast Asia.

Polytechnic: Refers to technical colleges.

Programs: Course programs, curricula, and services provided by community colleges.

Short-Cycle Education: "Post secondary education that offers one of several opportunities: career preparation for middle-level managerial or technical employment; first-cycle study, usually comprising the first two years of a university education; development and remedial education; or community service" (Duperre, 1977, p. 3820).

### Delimitation

This study was limited to the development of a model for the organization, administration, and programs for community colleges in Malaysia. In developing this model, a review of literature related to community colleges, interviews with administrators of community colleges in the United States, and a survey on the perceptions of selected Malaysian educators, politicians, and businessmen, pertaining to the matter were used as the sources of information.

### Organization of the Dissertation

This study is organized as follows:

Chapter 1 includes the introduction, statement of the problem, purpose of



the study, need for the study, delimitation of the study, questions for consideration, and definition of terms.

Chapter 2 presents the review of literature relative to the problem. It provides the philosophical and historical background of community colleges, characteristics, purposes, functions, services, programs, organizational and administrative structures, and tasks of community colleges.

Chapter 3 describes the research methodology of the study, the design, study sample, type of procedure, sources of data, gathering background information, instrumentation, mailing of questionnaire, analysis of data, and evaluation by panel of experts.

Chapter 4 provides a brief overview of the country, the people, the government, the economy and the education in Malaysia, and analysis of data from visitations to community colleges in Michigan, United States, and the Ministry of Education of Malaysia. Analysis and tabulation of data from survey questionnaires of Malaysian leaders are presented.

Chapter 5 offers the recommended model regarding philosophy, purposes, organization, administration, and programs for community colleges in Malaysia.

Chapter 6 presents a summary of findings, answers to questions raised, conclusions, and suggestions for further study.

## CHAPTER II

### REVIEW OF RELATED LITERATURE AND RESEARCH

#### Introduction

Rapid changes have rippled the economic, political, social, and educational landscapes of the world over the last two decades. The industrial countries have become high-tech nations. Some Third World countries have become newly industrialized countries (NICs). Other Third World countries are fast developing. These achievements would not have been possible without men's quest for knowledge.

According to Toffler (1990, p. 9), Japan's economic and technological rise was due to their recognition that "knowledge was the key to economic growth in the 21st century." The proliferation of robotics which can turn out quality products has profoundly affected the economies of advanced countries. Toffler (1990) further contended that the explosion of knowledge has thrown the advanced countries into bitter global competition, confronted the socialist nations with their hopeless obsolescences, and forced many developing nations to discard their outmoded economic strategies. Winston Churchill (cited in Toffler, 1990, p. 10) had remarked that "empires of the future are empires of the mind."

This chapter provides the review of literature on various areas pertinent to this study. The subjects included: (1) importance of human resource development, (2) philosophy of the community college, (3) history of community college, (4) what is a community college, (5) purposes and functions of the community college, (6) theoretical framework on organization, (7) models of administration of the community college, (8) organizational structures of the community college based on bureaucratic and participational models, (9) administration of the community college (10) funding of the community college, and (11) designing programs for the community college.

#### Importance of Human Resource Development

It is a universal view of advanced and developing countries that economic development cannot be attained without first developing the human resources.

Harbison and Myers (1964) defined human resource development as:

the process of increasing the knowledge, the skills, and the capacities of all the people in a society. In economic terms it could be described as the accumulation of human capital and its effective investment in the development of an economy. In political terms, human resources development prepares people for adult participation in political processes, particularly as citizens in a democracy. From social and cultural points of view, the development of human resources helps people to lead fuller and richer lives, less bound by tradition. In short, the processes of human resource development unlock the door to modernization. (p. 2)

They indicated that the development of human resources could be implemented in four ways: (1) through formal and non-formal education; (2) through informal education such as in-house training programs, adult education, and membership in political, social, religious, and cultural organizations; (3) through self-development of the individuals as they seek to improve themselves educationally through their own initiative; and (4) through improving the health of the people through medical and public health programs.

Harbison and Myers (1964) stressed that the development of people and the organization of human activity are essential in nation building. In economic growth, manpower is more important than "capital, natural resources, foreign aid, and international trade" (p. v).

They commented that human resource development could be a reliable indicator of modernization or development. It is also an essential condition for social, political, cultural, and economic development. Harbison and Myers (1965, p. ix) also contended that if a country could not develop its human resources, "it cannot build anything else, whether it be a modern political system, a sense of national unity, or a prosperous economy."

Harbison (1973) observed that human resource problems fall into two general categories: first, the underdevelopment of skills, knowledge, and talent of persons in the labor force; and second, the underutilization of their energies and

capabilities. He defined a less developed country as

characterized by general underdevelopment of its human resources. A large proportion of the population is illiterate; there are critical shortages of nearly all strategic skills; man's mastery of nature is limited; and as a consequence, the productivity of the masses is very low. (p. 14)

Parnell (1990, pp. 37-45) stated that human resource development is becoming increasingly important, and thus, it is essential to strengthen the link between economy and education. He contended that a nation's economic well-being in the future will be tied to full development and utilization of human resources. People should be educated and trained because they are essential resources for maintaining the economic health of a nation. He suggested that the work force of the future must develop higher levels of problem solving and reasoning abilities. They must be computer literate and broadly educated. Providing a better education for the new generation of workers is a major challenge for post secondary education. Flexible higher education programs must be developed to accommodate the needs of the working people. It is necessary to include the development of human resources in a nation's economic strategy.

In noting the economic miracle of the Pacific Rim, Naisbitt and Aburdene (1990, pp. 179-215) indicated that one of the factors for their success was their commitment to education. They contended that in the new economic order the countries that prioritized education would be the most competitive. They concluded

that even countries that do not have natural resources could develop as long as they develop their human resources.

It is clear that education or human resource development is an essential factor in the development of a nation. It is pertinent, therefore, that a study that concerns the establishment and strengthening of one of the tools of education such as the community college system for Malaysia be explored.

### Philosophy of the Community College

In tracing the historical context of the community college, it is necessary to first examine its basic philosophy. According to Foresi (1974), if the community college portrays any single ideal, it is in responding to societal needs and being flexible in adopting new programs and approaches when they are needed and become expedient. He presented a list of concepts underlying the philosophy of American community colleges as follows:

1. The traditional American belief of providing equal opportunity through education to all its citizens.
2. The American belief that each individual should be allowed access to the highest tier of social and personal status that his talents may permit.
3. It was and is an important aim and function of the community college to provide the skilled personnel that America's rapid development will demand.

4. American awareness that free public secondary education did not suffice to provide either full individual development or maximization of skill required by an expanding society.
5. Several leading educators in the prestigious colleges and universities suggested that the first two years of higher education should occupy a distinctive position within the university structure.
6. The federal government committed itself to expanding colleges devoted to agricultural and mechanical education in an attempt to provide skills sorely needed by the changing American economy. (pp. 3-7)

Thornton (1972) pointed out that the principles underlying the community college are:

to make higher education available to qualified students of all ages, all social classes, all varieties of ability; to develop sufficient variety of curriculums to meet the educational needs, at this level, of the community and of the individual students; to provide counseling and guidance services to help students choose appropriately from the available offerings; to devote concerted attention to effective teaching; and to encourage the highest levels of achievement of its students. (p. 44)

Thus, the philosophy of community colleges in the United States was rooted in its history of making education accessible to all people, and was a response to its economic, social, political, and educational needs.

#### History of the Community College in the United States

The history of the community college movement in the United States can be traced back to its philosophical foundations which began to emanate in the mid-1800s.

The main factors leading to the founding of this institution were: (1) the ideas for reform of higher education in the latter part of the 1800s by leading educators, (2) the growing economy of the nation which led to rising productivity and the need for more educated workers, and (3) the social phenomenon called "The American Dream."--"the belief inbred in every stratum of society that education is a social and individual good and that society is obligated to provide as much of it as any individual desires and can profit from" (Thornton, 1972, p. 47).

Thornton (1972) divided the development of the community college into four stages. The first stage was from 1850 to 1920, when the idea of having junior colleges as separate institutions offering the first two years of college was initiated. The second stage was from 1920 to 1945, when the concept of terminal and semiprofessional education in the junior college became a widespread practice with the founding of the American Association of Junior Colleges in 1920. The third stage was from 1945 to 1965, beginning with the post World War II years, when the junior college extended its service to the adults in the community and the introduction of its transfer function which made it a part of the total system of higher education. It was a period of rapid growth for the community junior college. The fourth stage was from 1965 onwards when the open-door concept of the community junior college was added.

The inception of the precursor of the community college known as junior college was in the early years between 1850-1920. It started with the concern of some



of the leading educators in the mid-1800s to reform the system of higher education in America. According to Hillway (1958, pp. 33-59), during the latter half of the nineteenth century, American education was being influenced by the German school system. Germany then was the leading industrial nation in Europe and was noted for its achievements in science and technology. Some of these reformists wanted to emulate the German school system. They noted that in Germany there were two grade levels beyond the 12th grade. The 13th and 14th grades were called Gymnasium. A student enters the university only after completion of the 14th grade.

They contended that with this system the students would be more mature and better prepared to handle the demands of advanced work in the university. The first educator to respond to this idea was Henry P. Tappan, President of the University of Michigan, in 1851. He recommended that the programs of the institutions of higher learning in the United States be reorganized in the German fashion. He advised that only students who had completed the 14th grade could be admitted to the university.

This idea was again propounded in 1869 by William Watts Folwell, President of the University of Minnesota. He proposed that the high schools and academies "assume responsibility for the education of boys to about the age of 20. The students would then be mature enough to undertake the serious and advanced studies of the university" (Hillway, 1958, p. 34).

While Tappan and Folwell subscribed to relegating the first two years of university level to an extension of the 12th grade of high school equivalent to the 13th and 14th grade level, they did not, however, propose the establishment of junior colleges. Notwithstanding their insistence to extend the high school level to the 14th grade, they, however, failed to gain support for their proposal. This was because "most communities prefer a high school which ends at the twelfth grade" (p. 35). It was also noted that while the Gymnasium teaches its subjects "more thoroughly and extensively, the American high school offers a broader curriculum and has proved itself admirably capable of meeting the principal needs of American students" (p. 36).

Opposition to the proposal was also rooted to the differences in the educational approach between Europe and America. Hillway (1958) pointed out that:

European educational systems generally have been established upon the design of setting up frequent barriers to advancement. All but the most promising European students are shunted early into terminal vocational schools; only those of distinctly superior ability manage to reach universities. The European theory, resulting probably from intense competition for economic security and social position, has been that the less fit must be eliminated from education at certain stages. The American theory, on the other hand, has been that every student should be allowed to advance educationally as far as he justifiably can. (p. 36)

The move to reform higher education in America was further intensified in 1890, when William Rainey Harper, President of the University of Chicago, "launched a series of educational reforms" (p. 37). He advocated that the four years of university be organized into upper and lower divisions. He called the lower division the "academic

college" which covered the first two years of university. He called the upper division the "university college" which covered the third and fourth year of university. Four years later these divisions were designated "junior college" and "senior college". He suggested that the high school and academies should be extended to the 14th grade. His proposal was accepted by some high schools. By 1904, there were 24 six-year secondary schools in the United States.

Hillway (1958) summarized Harper's ideas for the establishment of the junior college system which he delivered in his decennial president's report in 1902 as follows:

1. The end of the second college year was the right time for many students to end their college studies.
2. Some students who did not wish to undertake four years of college studies might be willing to attempt the two-year programs.
3. As more students were able to take two more years of schooling after high school, the standards of the professional schools, such as those for medicine and law, might be raised by requiring longer preprofessional study before admission.
4. It would be cheaper to finance higher education if high schools and academies added the junior college unit, and if some colleges reduced their programs from 4 years to 2.

5. As more opportunities for education beyond the twelfth grade were made locally available, students could continue to live at home until they became more mature.

Some of the arguments that Harper made formed the basis that activated communities to establish junior colleges. Subsequently, because of the strong impact he made in reforming the collegiate education in the United States, he has often been called the "father of the junior college" (p. 39). The junior college movement became active around 1900. In 1897, Decatur Baptist College in Texas became the first private institution to start the two-year college program. In 1902, Joliet Junior College in Illinois became the first public institution to offer the two-year college program. Both institutions are still in existence.

From 1920 onward, the junior college movement began to expand rapidly. By 1921 there were 207 junior colleges with a total enrollment of 16,000 students. These institutions were collegiate and separated from the secondary school system. In 1922, the American Association of Junior Colleges defined the junior college as an "institution offering two years of instruction of strictly collegiate grade" (Thornton, 1972, p. 52).

The period between 1920 to 1945 saw the expansion of occupational programs in the junior colleges. The post World War I period ushered in the passage of federal vocational education bills that had impacted the educational institutions. Prokopec (1979) pointed out that as early as 1917, Dean Alexis Lange of the University

of Southern California had urged that junior colleges also should include terminal programs for general and occupational education. Subsequently, California became the first state to incorporate the transfer and terminal programs into the junior colleges.

They provided that:

Junior college courses of study may include such studies as required for the junior certificate at the University of California, and such other courses of training in the mechanical and industrial arts, household economy, agriculture, civic education, and commerce as the high school board may deem advisable to establish. (Thornton, 1972, p. 52)

Meanwhile, similar moves made by the other states led to the provision of vocational courses. Consequently, by 1925 the American Association of Junior Colleges revised the definition of a junior college:

The junior college is an institution offering two years of strictly collegiate grade. This curriculum may include those courses usually offered in the first two years of the four-year college, in which case these courses must be identical, in scope and thoroughness, with corresponding courses of the standard four-year college. The junior college may, and is likely to, develop a different type of curriculum suited to the longer and ever-changing civic, social, religious, and vocational needs of the entire community in which the college is located. It is understood that in this case also the work offered shall be on a level appropriate for high school graduates. (cited in Thornton, 1972, p. 53)

Thus, this period saw the expansion of occupational programs in junior colleges. Thornton (1972) stated three factors that were influential in this move:

1. The extensive unemployment during the depression of 1929-1937 fostered the spread of occupational education. It was felt that specific training beyond

the high-school level would give an applicant a competitive advantage in the job market.

2. During the 1950s, mass production in industries required workers with higher standards of technical skills.

3. Many public junior colleges stressed the importance of working closely with their communities, making employers and workers to request the incorporation of additional occupational programs into the curriculum of these colleges. These developments led the junior colleges to attain their own identity and to have specific purposes and functions.

The third stage of development of the junior college was the emergence of the community college concept between 1945 and 1965. Thornton (1972) contended that while the junior colleges had added occupational programs to their curriculum, they still had not achieved the full status of a community college. In attaining this, the junior colleges added two essential programs, namely the adult education and community services programs. The outbreak of World War II saw a drop in enrollment in day classes which prompted the colleges to take a more active role in community related tasks. These programs continued during the post-war period which led to the development of the community junior college.

Interest in getting the junior colleges to engage in community services, however, had been echoed as early as 1930. Writing in the Junior College Journal,

Nicholas Ricciardi (cited in Thornton, 1972) defined the functions of the community junior college which served as a model for later definitions:

A fully organized junior college aims to meet the needs of a community in which it is located, including preparation for institutions of higher learning, liberal arts education for those who are not going beyond graduation from the junior college, vocational training for particular occupations usually designated as semi-professional vocations, and short courses for adults with special interests. (p. 55)

And in 1936, Byron S. Hollinshead (cited in Thornton, 1972) restated the same ideals:

That the junior college should be a community college, meeting community needs; that it should serve to promote a greater social and civic intelligence in the community; that it should provide opportunities for increased adult education; that it should provide educational, recreational, and vocational opportunities for young people; that the cultural facilities of the institutions should be placed at the disposal of the community college should be closely integrated with the work of the high school and the work of the community institutions. (p. 55)

In 1940, the Commission on Terminal Education stated as its fundamental principle that "The Junior College is essentially a community institution" (Thornton, 1972, p. 56). Hence, it was during this period when junior colleges were recognized as community colleges.

Thornton (1972) called the period from 1965 onward a period of consolidation. It was a time of improving the performance of community colleges rather than expanding their responsibilities. Government had helped provide funds for building, technical programs, and faculty development. They were made accessible to

disadvantaged students, especially in districts where there were large populations covering large areas. Many community colleges admitted students from minority groups. The occupational programs were reexamined and modernized. The transfer education program became more important as institutions of higher learning were limiting their admissions to juniors or third-year college students.

Thornton (1972) noted that, ironically, this was the universities' proposal in the late 1800s. He also indicated that the guidance and counseling services would play a key role in ensuring the success of the programs of community colleges. In effect, therefore, the inception of junior colleges in the late 1800s finally led to the development of the community college movement in the 1900's.

### Rapid Growth of Community Colleges

Landrith (1981, pp. 39-43) listed eight factors which were responsible for the rapid growth of the community colleges:

1. Population growth--the increase in the population of college-age groups
2. Changes in technology--mechanization and automation in industries ushering in the need for occupational skills and training
3. Change in attitude toward education--greater demand for technical education



4. Accessibility of the local junior college
5. Low tuition
6. Variety of transfer and occupational programs
7. Better qualified faculty
8. The junior college facilities.

Since its founding in the United States, the community college movement has spread to other countries. Yarrington (1977, pp. 843-844) pointed out that Japan established its first junior college in 1950; by 1970, they had 400 more. Canada has set up a National Association of Canadian Community Colleges for two-year college programs. Their community colleges started in the mid 1960s. Australia has many urban and regional colleges offering post secondary education and vocational training. Taiwan has more than 70 technical junior colleges. Countries such as Ireland, Jordan, Denmark, Sri Lanka, and Venezuela also have community colleges. In Europe, countries such as Norway, the United Kingdom, and the Netherlands have similar forms of college programs as those in the United States.

Duperre (1977, pp. 3820-3825) reported that countries like Yugoslavia, Switzerland, and Federal Republic of Germany have short-cycle education. Other countries such as China, Korea, Sri Lanka, Philippines, Colombia, Peru, Mexico, Brazil, and Israel also have short-cycle institutions similar to community colleges.

### What Is a Community College?

The community college has various names. In the early years between its inception in the late 1800s and pre-World War II years, it was known as the junior college. During the post-World War II period until the early 1960s, it was commonly called the community junior college. Since then, it has been known as the community college. The community college has evolved to its present status through a series of processes as the community college expanded its programs and services to meet the needs of society.

O'Connell (1968, pp. 3-4) described a community college as a two-year junior college that is usually coeducational. It is usually only for community students. Hence, there are usually no dormitories. It serves a diverse group of students. However, there are two main groups of students: (1) those who plan to transfer or continue their studies after completing the first 2 years at the community college, and (2) those who would seek employment after completing the two-year program.

It is multi-purpose, which makes the community college popular. The transfer or liberal arts program contains the same amount of core programs in social sciences, the sciences, and humanities that are found in the first 2 years of a 4-year college or university. There are specialized programs called occupational or terminal programs. These career programs prepare students for employment in the business and industrial sectors.

O'Connell (1968) also contended that the cost of attending a community college is cheaper because (1) it has larger lecture classes, (2) it has many introductory courses, (3) less equipment is required, and (4) it is non-residential. He noted that many community colleges are tuition free. They usually have an open-door policy on admission. He pointed out, however, that while it is easy to be admitted, it is "not easy to stay in" (p. 5).

Gleazer (1968, pp. 36-37) listed thirteen characteristics of a community college as follows:

1. A part of higher education in a state plan.
2. Receiving an increasing proportion of financial support from the state.
3. Established and operated under standards set at the state level.
4. Admitting all students who can benefit by a program.
5. Charging little or no tuition.
6. Having almost entirely students who commute.
7. Increasing the number and variety of technical and semi-professional programs.
8. Comprehensive in its programs.
9. Providing services to aid undereducated students of post-high school age.
10. Looking to a state-level junior college board for coordination of planning, programs, and services and for state aid.

11. Represented in a state board or council for coordination with other institutions of higher education.
12. Having a separate and distinct district board, facilities, and budget.
13. Locally initiated and controlled, with sufficient state participation to maintain standards.

Fields (1962, pp. 65-71) provided the following six characteristics of a community college:

1. Accessibility--it is accessible to all students
2. Non selective--it has an open-door policy on admission
3. Availability--it is available to all students
4. Low cost or tuition free
5. Democratic--it serves all the citizens of its community
6. Comprehensive - it provides a wide variety of programs and services

to meet the needs of students and needs of the employment market.

#### Purposes and Functions of the Community College

Community colleges were established with the goal of meeting the educational needs of society. They have specific purposes and functions. Fields (1962), Keene (1964), Harlarcher (1969), and Bender (1980) have studied the purposes and functions of community colleges.

According to Fields (1962) the purposes of community colleges are:

1. Preparation for advanced study,
2. Vocational education,
3. General education, and
4. Community services (p. 71).

Keene (1964) stated that the purposes of community colleges are:

1. Guidance and counseling,
2. Pre-professional or transferable training,
3. Vocational and technical education,
4. Adult education, and
5. Community services (p. 7).

Harlarcher (1969) pointed out that the purposes of community colleges are:

1. Preparation for advanced study (transfer),
2. Occupational education (terminal),
3. General education,
4. Guidance and counseling, and
5. Community services (p. 3).

Bender (1980) listed six purposes of the community college as follows:

1. Transfer programs,
2. Occupational programs,
3. General education,
4. Guidance and counseling,
5. Community services, and
6. Programs for the disadvantaged (p. 32).

It is clear therefore that the purposes of community colleges are multifaceted and comprehensive. While some of the descriptions of the purposes vary, they imply the same programs. In describing the transfer program, Fields (1962) and Harlarcher (1969) used the term "preparation for advanced study". For the terminal program, Fields (1962) and Keene (1964) used the term "vocational and technical education."

Harlarcher (1969) and Bender (1980) used the term "occupational programs." Unlike the others, Bender (1980) listed "programs for the disadvantaged" as the sixth purpose of the community college. In general, Harlarcher's description succinctly captured the essence of the purpose of the community college as follows:

Preparation for Advanced  
Study (Transfer Program)

The transfer program is equivalent to the first 2 years of a 4-year college or university degree program. Students who aspire to pursue a degree will enter this program, which will prepare them for such an undertaking. After completing this program, they will transfer to a 4-year college or university to continue their study.

Occupational Education  
(Terminal Program)

The occupational programs are also called technical, vocational, or pre-professional programs which terminate after 2 years of study or less. Students who enroll in this program will seek employment in business and industry after completing their study.

General Education

This consists of intellectual disciplines commonly known as liberal arts. Hillway (1958) noted that the aim of this program is to convey knowledge that is "useful

to the student in his personal, social, and civic development. It is intended to assist him in becoming a well-informed and cultured person, a well adjusted member of society, and an effective citizen" (p. 97). The subjects covered are communication, the humanities, science, and social studies. Communication includes reading, listening, speaking, and writing. The humanities includes art, literature, music, and philosophy. Social studies consists of history, sociology, health, recreation, and related subjects. Hillway (1958) concluded that the aim of general education is to develop a well-educated individual with the following qualities:

1. The ability to use effectively language and mathematics, the common tools of communication;
2. Comprehensive and usable knowledge of nature and science;
3. An understanding of human society and its development;
4. Acquaintance with and appreciation for the fine arts;
5. Ethically sound attitudes toward his fellow man;
6. Deep loyalty to the worth-while institutions of contemporary society; and
7. Confidence in man's capacity for improving his world. (p. 98)

### Guidance and Counseling

According to Hillway (1958, pp. 150-154), guidance is an integral part of the curriculum. It includes all the services of the institution which concern the individual

welfare of the student. The student personnel services consist of guidance, housing, health services, placement, and other services except instruction and library. The students' personal and social growth provide a favorable environment for their development. In providing this environment, Hillway (1958) pointed out that the aims of the guidance program should accomplish the following results:

1. The student will achieve orientation to his college environment.
  2. He will succeed in his studies.
  3. He will achieve a sense of belonging to the college.
  4. He will learn balanced use of his physical capacities.
  5. He will progressively understand himself.
  6. He will understand and learn how to use his emotions.
  7. He will develop likely and significant interests.
  8. He will progress toward appropriate vocational goals.
  9. He will develop individuality and responsibility.
  10. He will discover ethical and spiritual meaning in life.
  11. He will learn to live with others.
  12. He will progress toward satisfying and socially acceptable sexual adjustment.
  13. He will prepare for satisfying and constructive post college activity.
- (pp. 149-150)



Areas covered in guidance include orientation of students in such areas as registration, selection of courses, familiarization with rules, procedures and policies, getting acquainted with college personnel and other students. Other functions of guidance include collection and analysis of personal data and individual psychological testing. The latter measures academic intelligence, vocational preference, personal and social adjustments, and occupational aptitudes. Individual counseling interviews, placement, and counseling service to the community are also provided.

### Community Services

Harlarcher (1969, pp. 11-41) defined community services as "educational, cultural and recreational services which an educational institution may provide for its community in addition to its regularly scheduled day and evening classes" (p. 12). The 55th Yearbook of the National Society for the Study of Education, the Public Junior College (cited in Harlarcher, 1969) described the nature and scope of community services as:

increasing the productive efficiency of agriculture and industry, improving the functioning of communities and community organizations, contributing to the health and physical well-being of citizens, and enriching the cultural, aesthetic, and moral life of the community. (p.14)

In implementing the community service function, Harlarcher (1969) proposed the following principles:

1. In a community college the campus is the length and breadth of the junior college district.
2. The program of community services is designed to bring the community to the college and take the college program out into the community.
3. The educational program of the college must not be limited to formalized classroom instruction.
4. The community college recognizes its responsibility as a catalyst in community development and self-improvement.
5. The program of community services meets community needs and does not duplicate existing service in the community. (p.15)

In a study of community services of 243 community colleges, Medsker (1960,

p. 79) listed 11 categories of services:

1. Widespread use of the college physical plant by community groups.
2. Assistance by college in safety and thrift campaigns, fund drives, and the like.
3. Organization of special events, such as workshops, institutes, forums, for business, professional, or government groups either for the purpose of inservice training of employees or the general improvement of the group.
4. Promotion of cultural and recreational activities, such as the development of community musical groups, sponsoring of little theater groups.
5. Promotion of the college of community events in which public affairs are discussed.

6. Organization projects with the community agencies relating to the improvement of health conditions in the community.
7. Use of the college staff and students in making studies of the community (such as occupational surveys, sociological studies).
8. Widespread use of college staff as speakers to community groups.
9. Organization of services using college staff or students, or films and lectures from outside, to further the conservation of natural resources.
10. Research by college staff and students for business or professional groups in the community.
11. Organization of child-care programs for demonstration and instructional purposes.

In a study conducted on the catalogs of 69 California public junior colleges in 1964, Harlarcher (1969) observed that community service was a major function of community colleges. This included adult education, "community use of facilities, cultural programs, campus conferences, public affairs lectures, speakers' bureaus, short courses, community recreation, campus tours, and special events." (p.17)

From a survey of related literature, Harlarcher (1969) concluded that the major objectives of community services were:

1. To become a center of community life by encouraging the use of college facilities and services with the college's regular schedule;

2. To provide for all age groups educational services that utilize the special skills and knowledge of the college staff and other experts and are designed to meet the needs of community groups and the college district at large;
3. To provide the community, including business and industry, with the leadership and coordination capabilities of the college, assist the community in long-range planning, and join with individuals and groups in attacking unsolved problems;
4. To contribute to and promote the cultural, intellectual, and social life of the college district community and the development of skills for the profitable use of lecture time. (p.19)

### Theoretical Framework on Organization

A study of this type made it necessary to examine some of the prominent theories of organization. In examining the theoretical framework of organization, some of the questions discussed were: Why is organization necessary? What is an organization? What are the main theories of organization? How do these theories relate to the organization and administration of a community college?

Scott and Mitchell (1972, pp. 33-36) theorized that threats of human conflict were due to a force which they termed collision effect. This conflict stems from people being in proximity to and dependent upon one another. While these threats may be present in varying degrees in all forms of societies, they can disturb the harmonious functioning of human collaboration. Thus, in order to maintain a balance or equilibrium, it is essential to minimize or eliminate these disrupting forces.

They observed that, traditionally, organization was viewed as a rational vehicle for accomplishing goals and objectives. They contended, however, that organization could also be utilized to neutralize those forces that undermine human collaboration. Organization can minimize conflict and lessen individual behavior which may be anomalous to organizational values. It can strengthen stability in human relationships by reducing uncertainty in the organization structures and assigned functions. Corollary to this, organization can enhance the predictability of human behavior.

These points were stressed by Robert Presthus (cited in Scott & Mitchell, 1972, p. 34) who defined organization as a "system of structured interpersonal relations . . . . Individuals are differentiated in terms of authority, status, and role with the result that personal interaction is prescribed . . . . Anticipated reactions tend to occur, while ambiguity and spontaneity are decreased." He noted that organization has built-in safeguards. Apart from dictating acceptable behavior forms to the individual, it is able to counterbalance the influence of human action which exceeds its standards.

Barnard (1938, pp. 72-82) defined organization as a "system of consciously coordinated personal activities or forces". An organization comes into existence when there are people who can communicate with each other, and are willing to work together in accomplishing a common purpose. Thus, organization assumes three things: (1) a willingness to cooperate, (2) a purpose or objective to provide direction, and

(3) communication to link people with the organizational objective.

Scott and Mitchell (1972) postulated that organization is a "system of coordinated activities of a group of people working cooperatively toward a common goal under authority and leadership" (p. 36).

Mooney and Reiley (1939, p. 1) stated that organization is "the form of every human association for the attainment of a common purpose".

Dale (1967, p.10) proposed that organization is a "means of getting people to act together for a purpose, particularly for a business purpose."

In their study of organizational theory, Scott and Mitchell, (1972), Scott, (1969, 1973) and Shafritz and Whitbeck (1978) categorized three main theories of organization. They suggested the first as classical, second, neoclassical and third, modern. For the purpose of this study, however, only the classical and modern organization theories would be discussed.

According to the classical organization theory, organization is based on four key pillars. These are "the division of labor, the scalar and functional processes, structure and span of control" (Scott, 1973, pp. 12-13).

1. The division of labor is the main foundation among the other four elements. The other elements are corollaries of the division of labor. An example is that the scalar and functional expansion needs specialization and departmentalization of functions. The organization structure depends on the direction of specialization of

activities. The span of control is a corollary of the number of specialized functions under the purview of the manager.

2. The scalar and functional processes refer to the vertical and horizontal growth of the organization respectively. The scalar process is the "growth of the chain of command, the delegation of authority and responsibility, unity of command, and the obligation to report" (p.12). The functional process is the division of the organization into specialized parts and units that focuses on horizontal expansion of the line and staff.

3. Structure refers to the relationship of function in an organization that is arranged to achieve the organizational objective efficiently. It also implies system and pattern. Two basic structures under the classical organization theory are the line and staff.

4. The span of control relates to the number of subordinates that a manager can effectively manage. Wide span of control results in a flat structure. A short span produces a tall structure.

### Classical Organization Theory

Classical organization theory can trace its roots from the writings of Smith, Taylor, Fayol, Weber, Foliet, Gulick, and Mooney (Shafritz & Whitbeck, 1978, pp. 4-62). They all advocated the importance of division of labor. Scott (1969) noted that

classical organization is associated with Weber's bureaucracy. Weber (Eisenstadt, 1968, pp. 66-68) described bureaucracy or formal organization as follows:

1. There is the principle of fixed and official jurisdictional areas, which are generally ordered by rules, that is, by laws or administrative regulations.
2. The principles of office-hierarchy and of levels of graded authority means a firmly ordered system of super- and subordination in which there is a supervision of the lower offices by the higher ones.
3. The management of the modern office is based upon written documents ("the files") which are preserved in their original or draft form.
4. Office management, at best are specialized office management--and such management is distinctly modern--usually presupposes thorough and expert training.
5. When the office is fully developed, official activity demands the full working capacity of the official, irrespective of the fact that his obligation time in the bureau may be firmly delimited.
6. The management of the office follows general rule, which are more or less stable, more or less exhaustive, and which can be learned.

Weber clearly stressed the importance of division of labor. He also mentioned "jurisdictional areas ordered by rules," "the principles of office hierarchy," and "specialized office management."

Merton (1968, p. 249) described formal organization or bureaucracy within the context of classical organization theory as



clearly defined patterns of activity in which, ideally, every series of actions is functionally related to the purposes of the organization. In such an organization there is integrated a series of offices, of hierarchized statuses, in which inhere a number of obligations and privileges closely defined by limited and specific rules. Each of these officers contains an area of imputed competence and responsibility. Authority, the power of control which derives from an acknowledged status, inheres in the office and not in the particular person who performs the official role. Official action ordinarily occur with the framework of preexisting rules of the organization.

While classical organization theory is noted for its contribution to founding the concepts of formal organization or bureaucracy, it is not without criticism. As Scott (1973, p. 102) pointed out:

Paramount among these problems are those stemming from human interactions. But the interplay of individual personality, informal groups, intra-organizational conflict, and the decision-making processes on the formal structure appears largely to be neglected by classical organization theory. Additionally, the classical theory overlooks the contributions of the behavioral sciences by failing to incorporate them in its doctrine in any systematic way. In summary, classical organization theory has relevant insights into the nature of organization, but the value of this theory is limited by its narrow concentration on the formal anatomy of organization.

### Modern Organization Theory

Modern organization theory is distinct from the classical and neoclassical organization theories because it relies on empirical research data. It approaches the study of organization by studying it as a system. Scott (1973) noted that "it treats organization as a system of mutually dependent variables" (p. 108). It asks a range of questions which the other two theories do not consider. These questions include:

1. What are the strategic parts of the system?
2. What is the nature of their mutual dependency?
3. What are the main purposes in the system which link the parts together, and facilitate their adjustment to each other?
4. What are the goals sought by systems?  
(p. 108)

Modern organization theory is a composite of various frameworks of thought. Researchers in the field have their own emphasis. The unifying element in the study of systems is "their effort to look at organization in its totality" (p. 108). The various elements in system analysis are the "parts, the interactions, the processes, and the goals of systems" (p. 108).

The first part of the system is the individual. Included with the individual is his personality, his motives, and attitudes that he brings to the organization. The second part is the formal organization, that is, the "formal arrangement of functions." It is the "interrelated pattern of jobs which make up the structure of a system" (p. 109). The third part is the informal organization. The fourth part is the status and role patterns of the individual. The fifth part is the working environment.

These parts are interrelated to each other through the linking processes. Modern organization theorists pointed out that these processes consist of "communication, balance, and decision making" (p. 110). Communication is the mechanism which evokes action from other parts of the system. In addition, it serves

as control and coordination instrument in linking the "decision centers in the system into a synchronized pattern" (p.111).

Balance, on the other hand, refers to an equilibrating mechanism for the various parts of the system so as to maintain their harmonious relationship. Balance comes in two forms: quasi-automatic and innovative. Both forms of balance serve to maintain the system in the face of changing conditions that may be internal or external to the system. The quasi-automatic form of balance has "homeostatic" properties of systems; that is, the systems appear to manifest "built-in propensities to maintain steady states" (p. 111). The innovative form of balance arises when there is a need to adapt to a change that is not from within existing programs of maintaining the system in balance. Thus, new programs have to be developed to ensure internal harmony of the system.

Scott (1973, p. 112) also noted the importance of a cybernetic model in these processes. Cybernetics refers to a mechanism of feedback and control in all kinds of systems. Its function is to maintain stability in the system in the face of change. The study of cybernetics involves "communication networks, information flow, and some kind of balancing process aimed at preserving the integrity of the system."

Cybernetics concentrates on answering basic questions regarding the system. These are:

1. How are communication centers connected, and how are they maintained? Corollary to this question is: What is the structure of the feedback system?

2. What information is stored in the organization, and at what points?

And as a corollary, how accessible is this information to decision-making centers?

3. How conscious is the organization of the operation of its own parts?

That is, to what extent do the policy centers receive control information with sufficient frequency and relevancy to create a real awareness of the operation of the segments of the system?

4. What are the learning (innovating) capabilities of the system? Answers

to these questions are vital to understanding the balancing and communication processes in the systems.

The third process is decision making. March and Simon (cited in Scott, 1973) observed that there are two major classes of decisions. These are "decisions to produce and decisions to participate in the system" (p. 112). The former refers to the result of an interaction between individual attitudes and the needs of the organization. The latter focuses on issues such as the relationship between organizational rewards and the needs of the organization. It was suggested that participation decisions deal with the reasons why people stay or leave the organization. As internal variables, decisions in an organization depend on "jobs, individual expectations and motivations, and organizational structure" (March & Simon, cited in Scott, 1973, p. 113).

It can be summarized therefore that modern organization theory focuses on the following studies:

1. The parts (individuals) in aggregates, and the movement of individuals into and out of the system.
2. The interaction of individuals with the environment found in the system.
3. The interactions among individuals in the system.
4. General growth and stability of problems of systems.  
(Bouldings, cited in Scott, 1973, p. 113)

As noted this theoretical framework provides: (1) the rationale for organization, (2) the definition of organization, and (3) the main theories of organization. In the following two sections, it also provides how these theories relate to the organization and administration of a community college. Organization is needed to maintain a balance or equilibrium. It neutralizes those forces that undermine human collaboration. Organization is a system of consciously coordinated personal activities. There are three main theories of organization--classical, neoclassical, and modern. Classical organization theory is associated with bureaucracy or formal organization. Neoclassical organization theory expounds the importance of informal organization.

Modern organization theory treats organization as a system of mutually dependent variables. It looks at organization in its totality. The elements in system analysis are the systems' parts, interactions, processes, and goals. The first part of the system is the individual which includes his personality, motives, and attitudes that he brings to the organization. The second part is the formal organization. The third part

is the informal organization. The fourth part is the status and role pattern of the individual. The fifth part is the working environment. The processes consist of communication, balance and decision making. This includes the concept of cybernetics which refers to a mechanism of feedback and control in all kinds of systems. Based on these concepts are the three models of administration of community colleges--Theory X, Theory Y, and Theory Z.

### Models of Administration of Community Colleges

As this study pertains also to administration of the community college, it was essential to examine the major models of governance of these institutions. Included in this review are the patterns of organizational and administrative structure of the community college, the nature of its governance and functions, and the duties and responsibilities of its key personnel. It was appropriate to examine some of the management theories used in the corporate world and their application to the governance of the community college.

In recent years, modern management theory has focused on three styles of administration: Theory X, Theory Y and Theory Z (Silverman, 1987).

McGregor (1960), who first formulated Theory X and Theory Y, pointed out that Theory X is based on the following assumptions:

1. The average human being has an inherent dislike of work and will avoid it if he can.

2. Because of this human characteristic of dislike of work, most people must be coerced, controlled, directed, threatened with punishment to get them to put forth adequate effort toward the achievement of organizational objectives.
3. The average human being prefers to be directed, wishes to avoid responsibility, has relatively little ambition, wants security above all. (pp. 33-34)

Based on Theory X, people must be "coerced, controlled, directed" and "threatened with punishment" in order for them to perform their job adequately. Thus, the administrative style of Theory X is autocratic. The authority of the administrator is "supreme and group influence is minimal" (Silverman, 1987, p. 3).

McGregor also drew the assumptions of Theory Y as follows:

1. The expenditure of physical and mental effort in work is as natural as play or rest.
2. External control and the threat of punishment are not the only means for bringing about effort toward organizational objectives. Man will exercise self-directions and self-control in the service of objectives to which he is committed.
3. Commitment to objectives is a function of the rewards associated with their achievement.
4. The average human being learns, under proper conditions, not only to accept but to seek responsibility.
5. The capacity to exercise a relatively high degree of imagination, ingenuity and creativity in the solution of organizational problems is widely, not narrowly, distributed in the population.

6. Under the conditions of modern industrial life, the intellectual potentialities of the average being are only partially utilized. (pp. 47-48)

In Theory Y, people are described as willing to work and contribute toward the successful attainment of organizational objectives. The administrative style of Theory Y is democratic. The administrator encourages the participation of employees in decision making. The leader is seen as consulting with his subordinates. While the leader makes the decisions, there is an atmosphere where arguments and differing ideas may be heard. There is provision for a higher level of participation in a Theory Y setting.

In a Theory Z setting, Ouchi (1981, pp. 71-81), who first coined this Theory, described it as providing security to its employees. Employees are provided with long-term employment, often for a life time. The decision-making process is consensual and participative. There is broad concern for the welfare of subordinates and co-workers as a natural part of the working relationship. There is a holistic approach in the working relationship which stresses people working together rather than just managing workers. This provides a strong egalitarian atmosphere that is a feature of all Type Z organizations.

The administrative style of Theory Z, therefore, can be described "as 'pure' democracy" (Silverman, 1987, p. 2). The leader blends with the group in making decisions. Employees function best in groups. They regard team work as important.



The administrators treat employees as families. As can be seen, Theories X and Y deal primarily with the individual, while Theory Z centers on groups.

In his study of the administration of community colleges, Silverman (1987) noted that there are "elements of Theories X, Y and Z in operation, often in the same situation" (p. 2). He pointed out that:

Reappointment of non-tenured faculty often involves classroom evaluations by a "team" (Theory Z) and by a dean (Theory X). Promotion decisions may be based on the recommendation of a faculty "team" (Theory Z) and on a separate statement by the dean (Theory X). Tenure decisions are based, in part, on "team" evaluation (Theory Z), but final determination rests with the community college's president (Theory X). . . while the process to obtain tenure, reflects Theories X and Y, the actual receiving of tenure, matches one of Theory Z's tenets - employment until retirement. Department meetings, curriculum committees and community college faculty senates may be equated to quality circles, which are closely associated with Theory Z. Budgets may be developed with faculty input (Theory Y), but final decisions are often made by the president (Theory X). (pp. 3-4)

Silverman (1987) also noted a similarity between these theories and an alternative model of governance in higher education called "organized anarchy" proposed by Baldrige, Curtis, Ecker and Riley (cited in Silverman, 1987, pp. 5-8).

Within "organized anarchy", there are elements of "the academic bureaucracy," "the university collegium" and the "university as a political system." Silverman (1987) observed that under the "academic bureaucracy", the leader is the hero who holds much of the power. In the "university collegium," the leader is first among equals. In the "university as a political system," the leader is seen as a mediator and

negotiator. Thus, elements of the three systems--bureaucratic, collegial, and political--are present in the "organized anarchy" model. The components of academic bureaucracy resemble that of Theory X. The university collegium model is similar to Theory Z, and the university as political system resembles that of Theory Y.

In their study of organizational structure, Richardson, Blocker, and Bender (1972, pp. 86-113) had also discussed the differences of the bureaucratic (Theory X) and participational (Theory Y) model. They cited Likert's four different management systems which ranged "along a continuum from extremely authoritative to participative." These are "exploitative authoritative, benovolent authoritative, consultative and participative." They pointed out that the first two systems are based on Theory X axioms of human behavior. The last two are based on Theory Y assumptions.

Richardson et al. (1972) indicated the inadequacy of the "bureaucratic model and its consequences for communication, problem-solving, role conflict, and other facets of organizational life" in the educational setting (p. 109). They commented that the characteristics of the bureaucratic model, as illustrated in figure 1, are "inappropriate for the tasks facing two-year colleges in the final decades of the 20th century" (p. 109). Their criticisms ranged from the fact that (1) "communication is predominantly downward", (2) "objectives are established at the top of the organization with various methods", (3) "leadership is predominantly authoritarian" to (4) "there is little real opportunity for individual growth" (p. 109-110).

NATIONAL INFLUENCES AND RELATIONSHIPS		
Community Influences	Board of Control	State Influences

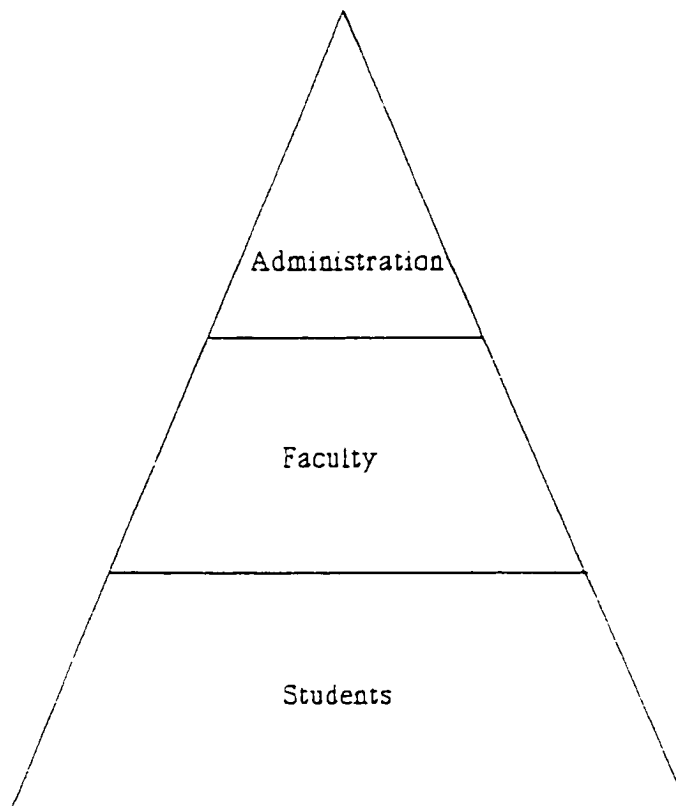


Fig. 1. Traditional Bureaucratic Model of an Organization

Source: Richardson, Richard C., Jr., Blocker, Clyde E., and Bender, Louis W. (1972). Government for the Two-Year College. (Englewood Cliffs, New Jersey: Prentice-Hall) p. 110, figure 5.2.

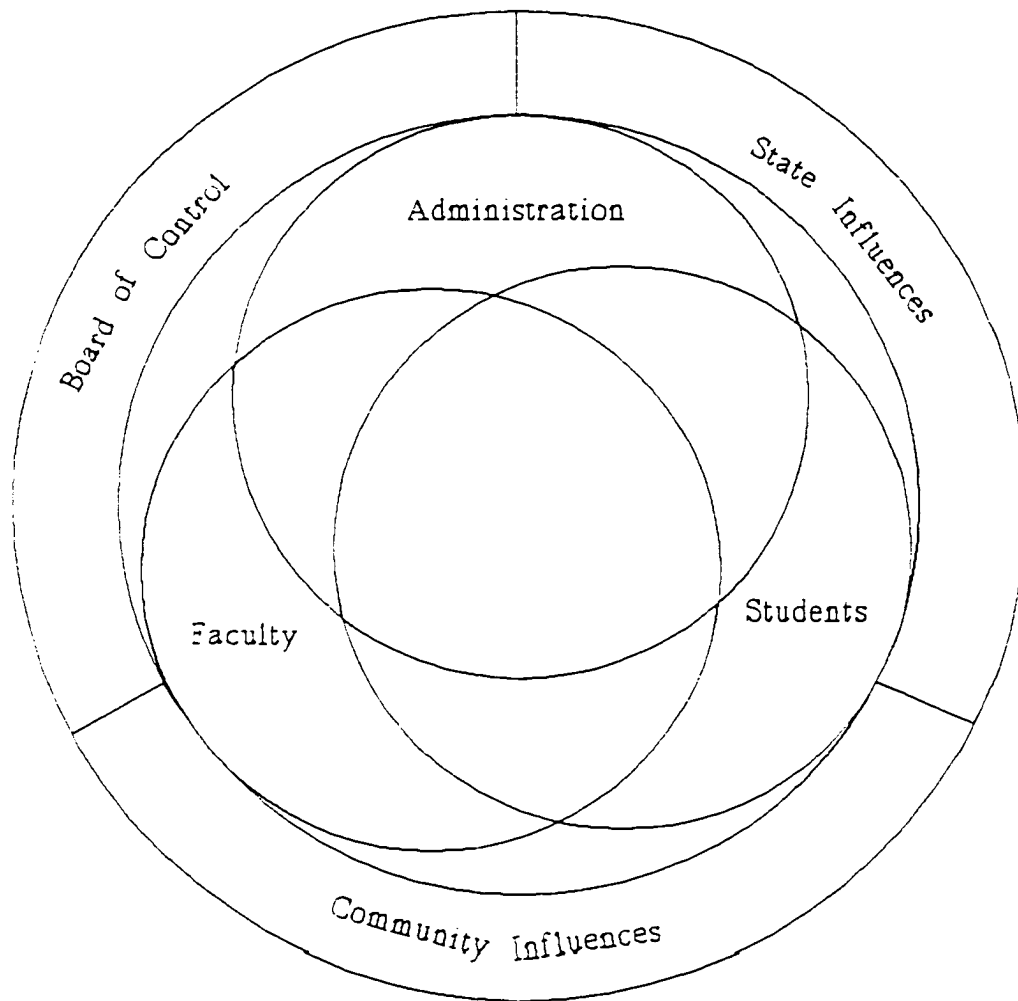
In contrast, the participational model, as illustrated in figure 2, shows the relationship of the external influences and the three major internal constituencies.

Richardson et al. (1972) pointed out that "rather than being mediated exclusively through the administrative structure, the external influences may impinge upon the internal environment through faculty and students as well" (p. 110). The "administration, faculty and students are not arranged in hierarchial order, but rather occupy individual spheres of responsibility and influence" (p. 111). The overlapping nature of the circles indicates "interdependency which replaces authority as the mode of control for instrumental behavior" (p. 111).

There is congruency between formal and informal organization, working to promote the organizational objectives. "Decision making is a shared responsibility with all of those affected by a decision represented in the decisional processes . . . . Relationships are cooperative . . . . The use of committees represents a real commitment to the solution of differences of opinion through compromise rather than by decree. Administrators . . . seek to encourage both high performance goals and the satisfaction of high-level human needs . . . . Individual growth is integrated with institutional goals and constitutes a central purpose for institutional existence" (p. 112).

The participational model is propounded by most recent writers in community college governance (Palmer 1985). This is reflected in the works of Bensiman (1984), Alfred (1985), Deegan (1985), Gollattscheck (1985), Lewis (1989), and

## National Influences



## National Influences

Fig. 2. Participational Model of an Organization

Source: Richardson, Richard C., Jr., Blocker, Clyde E., and Bender, Louis W. (1972) Government for the Two-Year College. (Englewood Cliffs, New Jersey: Prentice-Hall.) p. 111, Figure 5.3

O'Hara (1990), where they stressed the importance of faculty involvement and student input in governance. The American Association of Community and Junior Colleges (1988) also recommended the active participation of faculty leaders in governance.

In his study, Gollattscheck (1985) noted that most community colleges have moved from totally bureaucratic systems of internal governance to systems that provide for participation in decision making by other groups within the institution. He contended, however, that most have retained at least some vestiges of bureaucratic governance and thus have adopted an eclectic approach in their operation.

As noted Silverman (1987) and Baldrige et. al. (1990) indicated their predilection for the eclectic approach, contending that no one model would be the best.

#### Organizational Structures of the Community College Based on Bureaucratic and Participational Models

The organizational structure of the community college can be illustrated based on the bureaucratic and participational models. Figure 3 illustrates the bureaucratic model "as the most common organizational pattern among two-year colleges" (Richardson et al., 1972, p. 121). In her study, Bensiman (1984, p. 54) also noted that, compared with other institutions of higher learning, "community colleges exhibit stronger bureaucratic tendencies and a very high level of administrative dominance."

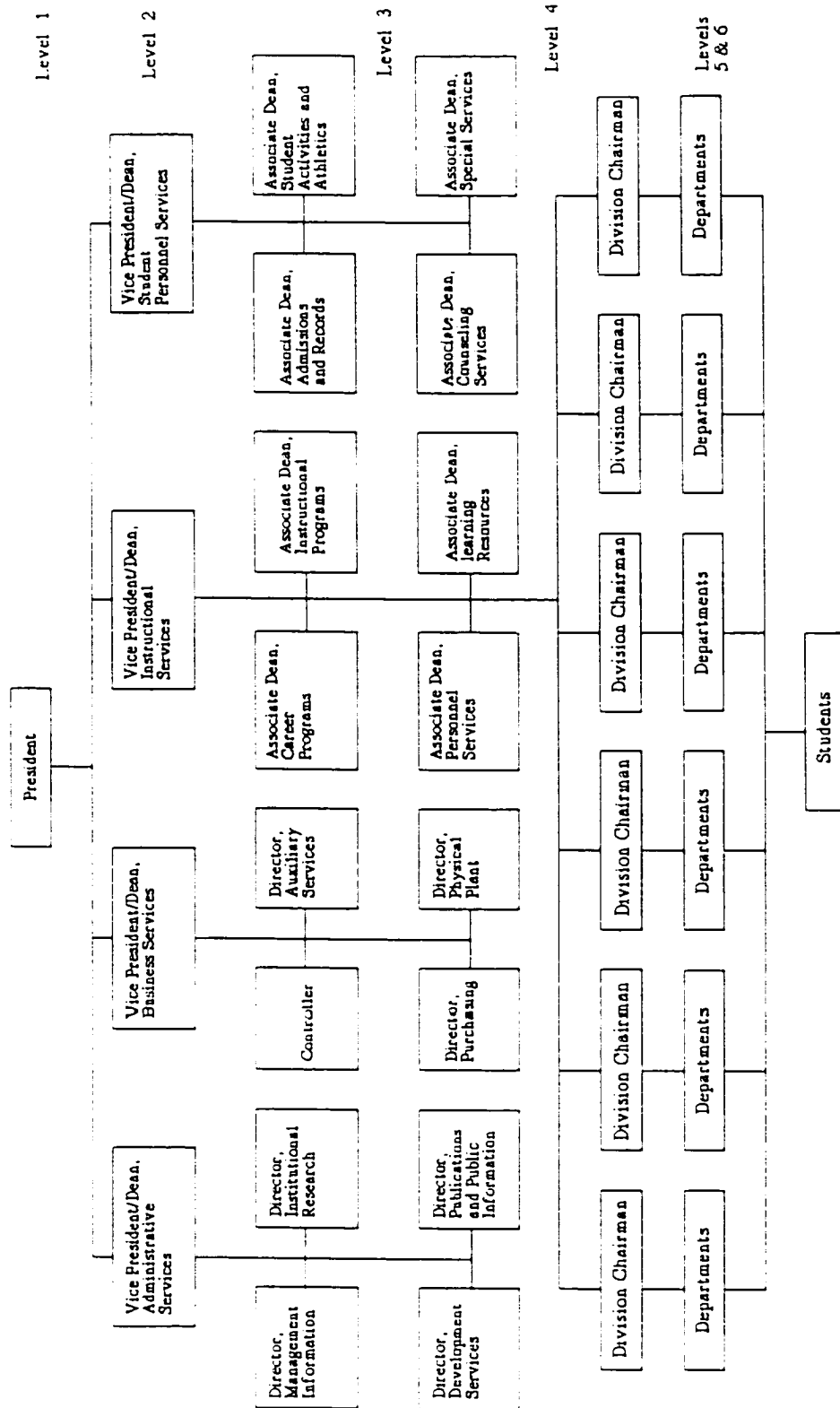


Fig. 3. Administrative Structure: Bureaucratic Model

Source: Richardson, Richard C., Jr., Blocker, Glyde E., and Bender, Louis W. (1972). *Government for the Two-Year College*. (Englewood Cliffs, New Jersey: Prentice-Hall) p. 122, figure 6.1.

This structure shows unity of command. Communication is within the chain of command. The organization is carefully controlled horizontally and vertically to avoid overlap of responsibilities. It stresses coordination within the various hierarchical levels. The faculty and students assume their respective positions at the lower rungs of the hierarchy.

By contrast, figure 4 illustrates the arrangement of administrative responsibilities in a participational model. Richardson et al. (1972) described the participational model as "dynamic and flexible." The various areas of specializations are interdependent with each other both vertically and horizontally. There are multiple channels of communication to "encourage two-way communication and problem solving" in the organization (p. 123).

#### Administration of the Community College

This review covers the roles and attributes of the key personnel in the administration of the community college and the functions of the major divisions within the organization. As indicated in figure 3, the key administrators of the community college include the president and four vice presidents or deans. The latter manage four major divisions of functions of the community college: (1) administrative services, (2) business services, (3) instructional services, and (4) student personnel services. Under each vice-president are various officers handling specific tasks. While the



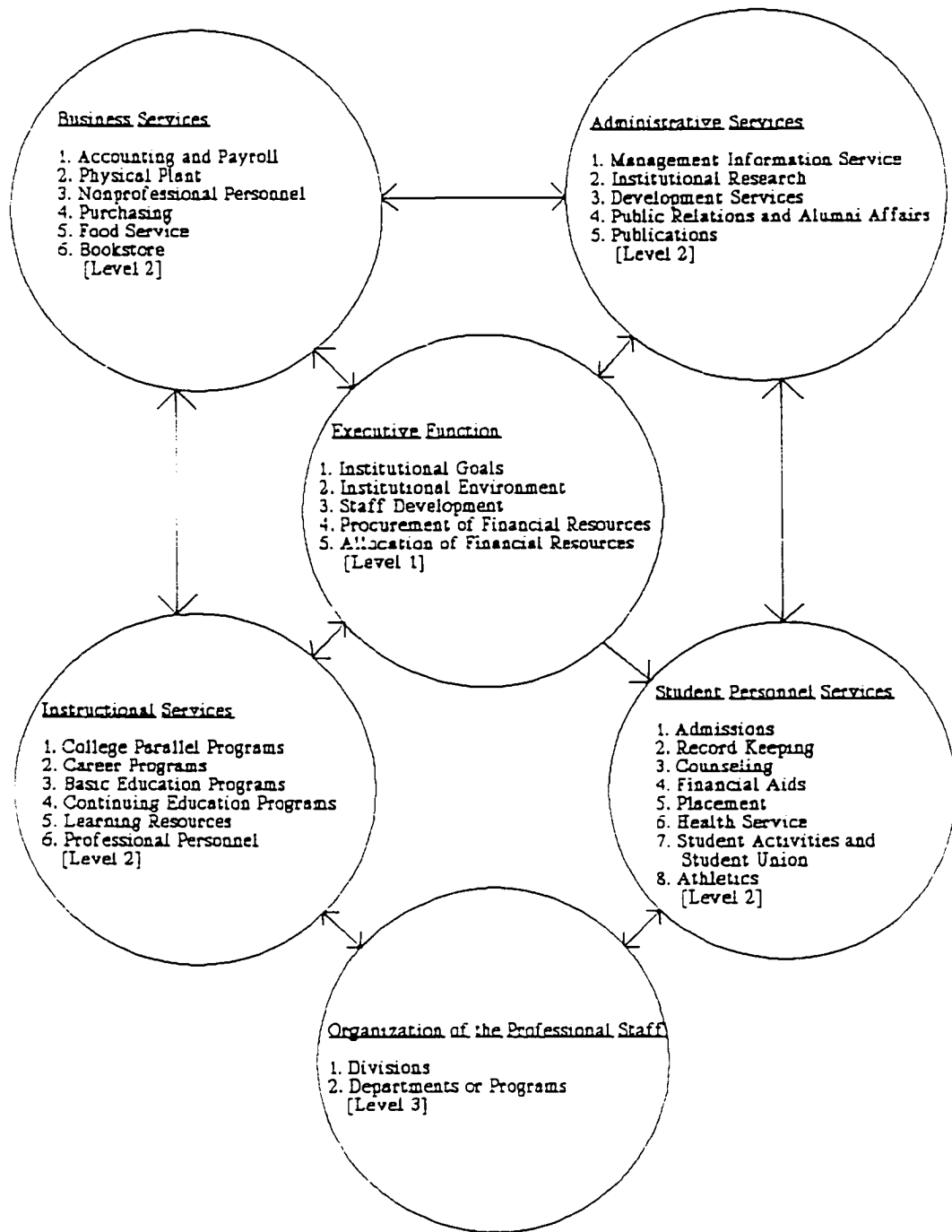


Fig. 4. Administrative Structure: A Participative Model

Source: Richardson, Richard C., Jr., Blocker, Clyde E., and Bender, Louis W. (1972). *Government for the Two-Year College*. (Englewood Cliffs, New Jersey: Prentice-Hall.) p. 124, figure 62.

president is the chief executive officer of the institution, he is, however, responsible to the board of trustees.

### Board of Trustees

The main governing body of the community college is the board of trustees. Evans and Neagley (1973) suggested that when the local sponsor and the state have approved the establishment of the community college, the process of electing or appointing the board of trustees should be effected. They pointed out that in state-controlled community college systems, the board may either be elected by the state electorate or appointed by the governor. The board derives its authority from the state's education code and is subject to the provisions of the state's constitution, the rules and regulations of the state board of education, and the "expressed will of the electorate" (Foresi, 1974, p. 77).

In selecting board members, Evans and Neagley (1973, p. 42) recommended the following criteria:

1. A minimum residence requirement of two to three years in area is desirable. . . .
2. A racial mix should be sought. . . .
3. There should be an age range, from young to mature.
4. It is desirable to have both men and women trustees.

5. All candidates should be civic-minded and committed to service on a community college board. . . .
6. One or more members of the council for higher education should be encouraged to serve. . . .
7. It is highly desirable to have various religions represented in the total make up of the board.
8. A good board is cosmopolitan in nature with persons from government, education, labor, business, industry and the professions. . . .
9. It is important that several members of the new board have demonstrated leadership ability.
10. Political affiliation is not a valid criterion for board membership. . . .

In An Information Guide on Board Organization, an Overview of the Florida Community College Systems presented by the Florida Community Colleges (1990), it noted that the selection of board members is often based on members' "prominence and stature in the community, their demonstrated community involvement and their degree of success they have achieved in their chosen fields" (p. 18). It suggested that the number of board members should not be less than five and not more than nine. Among the specific duties and responsibilities of the board are:

1. Appointing, suspending, or removing the president.
2. Recognizing outstanding employees.

3. Establishing and discontinuing program and course offerings; providing for instructional and non-instructional community services; locating classes and services; and disseminating information about programs and services.
4. Being the contracting agent of the college.
5. Exercising the rights of eminent domain to acquire private property, within the restriction of the law.
6. Entering into contractual and lease-purchase arrangements for equipment.
7. Purchasing and managing real property.
8. Establishing accounting for and receiving compensation for good, services, tuition, and fees.
9. Adopting a uniform code of appropriate penalties for violations of rules by students and employees.
10. Considering past actions of people applying for admission or employment.
11. Developing work products related to educational endeavors.
12. Providing rules governing parking and traffic control on campus.
13. Appointing, employing, and removing personnel.
14. Adopting rules providing loans, scholarships, and other student services.
15. Establishing policy for law enforcement operations.
16. Establishing and maintaining a personnel exchange program with universities, government, and private industry.

17. Assembling data and conducting surveys on the educational needs of the district.  
(pp. 19-20)

Apart from this list of duties, they also suggested that the board should be empowered to:

1. Develop and adopt a long range and annual program plan.
2. Establish rules for bonding members and employees.
3. Adopt rules for the reproduction and destruction of records.
4. Act on recommendations from the president related to employees.
5. Enter into contractual agreements with other agencies.
6. Enforce collections or settlement of delinquent accounts.
7. Provide non-discriminatory employment.
8. Designate any documents the president or a representative is authorized to sign. (p.20)

As can be noted, the authority of the board is extensive. It covers all the facets of operations of the community college. They are therefore required to execute their duties and responsibilities with vigilance and assiduity.

#### President

The first task of the board of trustees is the selection of the president. The appointment of the president is considered vital in the administration of the college.

Heidenreich (1974, pp. 18-19) pointed out that the president is the first "key" person in the administration. O'Connell (1980, p. 109) described the president as the "linchpin of the college." Evans and Neagley (1973, pp. 49-63) stressed the importance of the president's leadership in setting an organizational climate that will be conducive to students, faculty, and community.

According to these authors, the president serves various important roles. As an administrator, he spends a large portion of his time in planning alone and with the board and subordinates. B. Lamar Johnson (cited in Evans & Neagley, 1973, p. 52) described the scope of the president's initial planning work as follows:

1. Plan, develop, and prepare to offer an educational program designed to achieve the agreed-upon purposes of the college: *Curriculum and Instruction*.
2. Enroll, counsel, and organize students, and provide out-of-class services for them: *Student Personnel*.
3. Employ and organize a staff to administer and to teach the program of the college: *Staff Personnel*.
4. Secure and administer funds to pay the operational and capital outlay costs of the college: *Finance*.
5. Provide adequate plant and facilities in and with which to carry on the educational program: *Plant and Facilities*.
6. Enlist the interest, support, and participation of the community in the college and its program: *Community Service and Relationships*.

He reviews and analyzes reports; he also authorizes and approves the expenditures.

As an educational leader, the president works with the faculty on curriculum and instructions and counsels faculty on personal problems. He interacts formally and informally with the faculty and participates in instructions. He also meets with students. As a public relations expert, he meets with outsiders on college affairs. He communicates through speeches, news releases, and correspondence. He also secures financial support, especially if he is serving a private institution. He officially entertains guests, board members, and faculty members during social events. As a scholar, he is interested in research and writing. He also writes articles for publication and will encourage his staff to do so. He prepares papers and participates in conferences. He must also read widely to keep up to date with the latest developments in his field.

The roles of the president are multifaceted. The qualifications needed for his job are challenging. It is therefore uncommon for the board to be able to select a president with the ideal qualifications. As a guide to facilitate the selection process, however, Evans and Neagley (1973, pp. 60-62) offered the results of a study conducted by Tyrus Hillway on the opinions of 403 professors from 93 colleges. Desirable and undesirable characteristics of college presidents which may be helpful to board members are shown in tables 1 and 2.

TABLE 1

## CHARACTERISTICS OF COLLEGE PRESIDENTS

	Percentage Response (%)
DESIRABLE CHARACTERISTICS OF COLLEGE PRESIDENTS	
Integrity in personal and professional relations	24
Intellectual ability and scholarship	22
Ability to organize and lead	20
Democratic attitude and methods	11
Warmth of personality	6
High moral and intellectual ideals	5
Objectivity and fairness	5
Interest in education (and ed. philosophy)	2
Culture and breeding	1
Self-confidence and firmness	1

TABLE 2

	Percentage Response (%)
UNDESIRABLE CHARACTERISTICS OF COLLEGE PRESIDENTS	
Dictatorial, undemocratic attitude	24
Dishonesty and insincerity	15
Weakness as educator and scholar	15
Vacillation in organizing and leading	15
Poor personality	9
Bias or favoritism	6



They cited another study by Hillway conducted on 148 board members, regarding the factors considered by trustees in judging presidents and the most vital competencies of a president. (See tables 3 and 4)

TABLE 3

## FACTORS CONSIDERED BY TRUSTEES IN JUDGING PRESIDENTS

Factor		Percentage
		Who Consider (%)
1.	Leadership in maintaining high academic standards	90
2.	Good judgment in selecting faculty and staff	88
3.	Ability to maintain high morale among faculty and staff	86
4.	Facility for making friends in the institution	85
5.	General intellectual leadership in the college and community	85
6.	Fairness and honesty in treatment of faculty	80
7.	Good judgment in promoting faculty and staff	80
8.	Ability to maintain a balanced budget	78
9.	Respect accorded him by other educators	77
10.	Influence of his moral character on students and faculty	76

TABLE 4

## MOST VITAL COMPETENCIES OF A PRESIDENT

Competency		Percentage
		Response (%)
1.	Educational leader	52
2.	Management executive	45
3.	Public-relations expert	27
4.	Money raiser and businessman	16

They commented, however, that these "general characteristics are difficult, if not impossible, to assess in candidates who will be considered for the position" (p. 63). In making the criteria more attainable, Rauh (cited in Evans & Neagley, 1973, p. 63) suggested that:

instead of cataloging all the desirable virtues, some boards have found it more profitable to stress the key attributes that would serve identifiable current needs of the institution and to measure candidates in terms of their sympathy with such needs.

Gleazer (1968, pp. 104-105) proposed that it would be appropriate to assess the candidates' attributes and abilities against the following criteria:

1. Conviction of the worth and dignity of each individual for what he is and what he can become. Commitment to the idea that society ought to provide the opportunity for each person to continue appropriate education up to the limit of his potential.
2. Appreciation of the social worth of a wide range of aptitudes, talents, interests and types of intelligence. Respect for translating these into suitable educational programs.
3. Understanding of the interpersonal processes by which the individual comes to be what he is. Appreciation for the interaction of the college and other social institutions and agencies . . . . in providing a social milieu for personality development.
4. Knowledge of community structure and processes. Capacity to identify structures of social power and the decision makers involved in various kinds of community issues.

5. Understanding of education in our society and viewpoints about its role. Acquaintance with critical contemporary issues in education . . . . Commitment to community college services as part of a total educational program.
6. Some understanding of the elements at work which are changing society throughout the world.
7. Ability to listen, understand, interpret, and reconcile. Capacity to communicate.

In addition, Gleazer (1968, p. 105) suggested that the board should also ask the following questions:

Has this man enough stature in the field of education so that the leadership of other educational institutions will have respect for him and hence for this new institution we are creating? Or if not now, does he have potential in this regard? Do his attainments suggest to the community that the institution holds marked promise because it can attract a man of this caliber? And most important, what is there about him to persuade outstanding people to join in making this a superior institution?

Evans and Neagley (1973) recommended that the president should have a doctorate. He should also have had some exposure in the administration of higher education or experience in administration. Factors such as previous experience as a college dean or superintendent of schools should be considered. This consideration should also be extended to those with doctorates who have been successful administrators in business and industry.

### Vice Presidents

As noted in figure 3, page 60, Richardson et al. (1972, pp. 122-169) pointed out that under the president are four vice presidents/deans. These include vice presidents/deans for administrative services, business services, instructional services, and student personnel services.

Under the vice president/dean of administrative services are four departments, each headed by a director. As shown in figure 5, these are management information services, institutional research, development services and publications, and public information. Each department has its specific functions as listed in figure 5.

Reporting to the vice president/dean for business services are the controller, physical plant director, auxiliary services director, and purchasing director. Their functions are shown in figure 6.

Under the vice president/dean for instructional services are four associate deans heading the departments of career programs, instructional services, personnel services, and learning resources. The scope of their responsibilities is shown in figure 7.

Finally, under the vice president/dean of student personnel services are also four associate deans. Each associate dean heads a department. Their specific areas of functions are shown in figure 8. The four departments cover admissions and records, counseling services, activities and athletics, and special services.

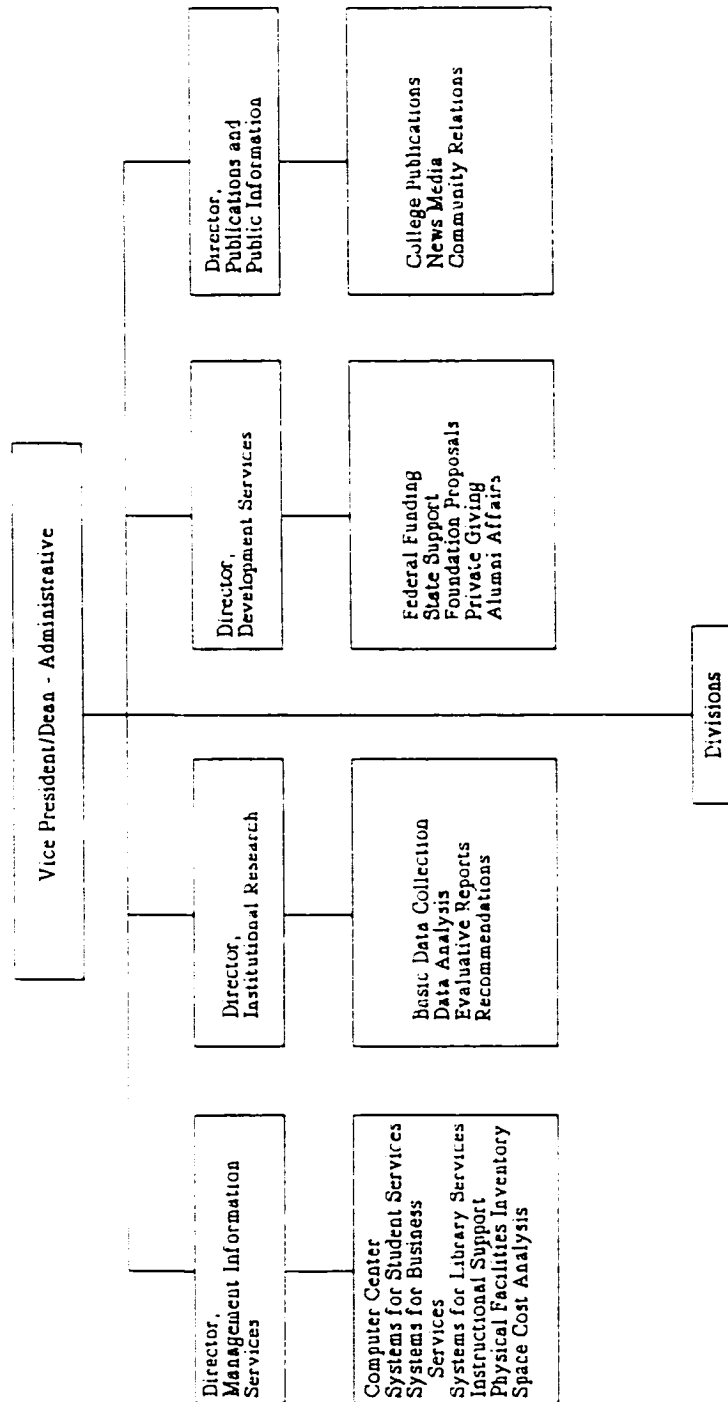


Fig. 5. Administrative Services

Source: Richardson, Richard C., Jr., Blocker, Clyde E., and Brender, Louis W. (1972). *Government for the Two-Year College*. (Englewood Cliffs, New Jersey: Prentice-Hall) p. 139, figure 7.1

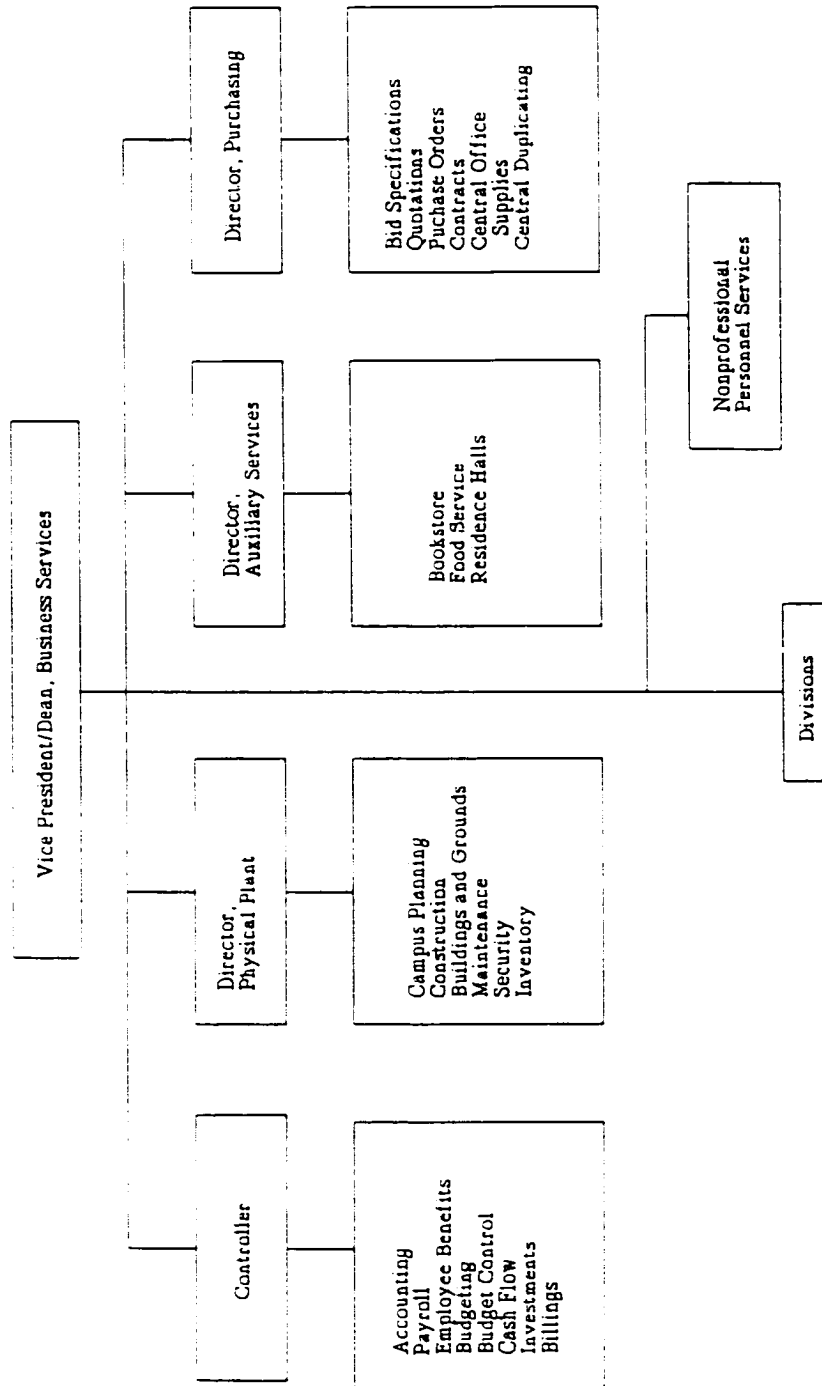


Fig. 6. Business Services Detail

Source: Richardson, Richard C. Jr., Blocker, Clyde E., and Bender, Louis W. (1972). *Government for the Two-Year College*. (Englewood Cliffs, New Jersey: Prentice-Hall.) p. 148, figure 7.2

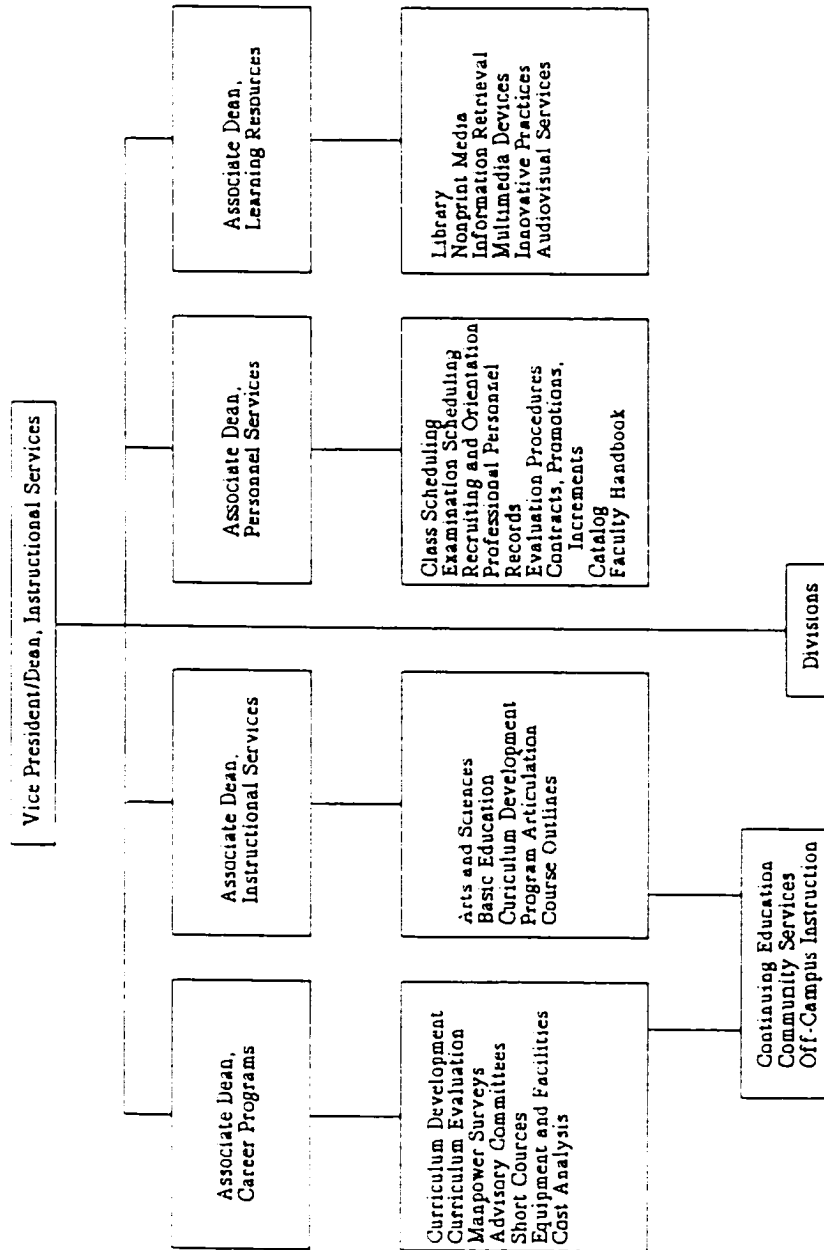


Fig. 7. Instructional Services Detail

Source: Richardson, Richard C., Jr., Blocker, Clyde E., and Bender, Louis W. (1972) *Government for the Two-Year College*. (Englewood Cliffs, New Jersey: Prentice-Hall.) p. 159, figure 8.1

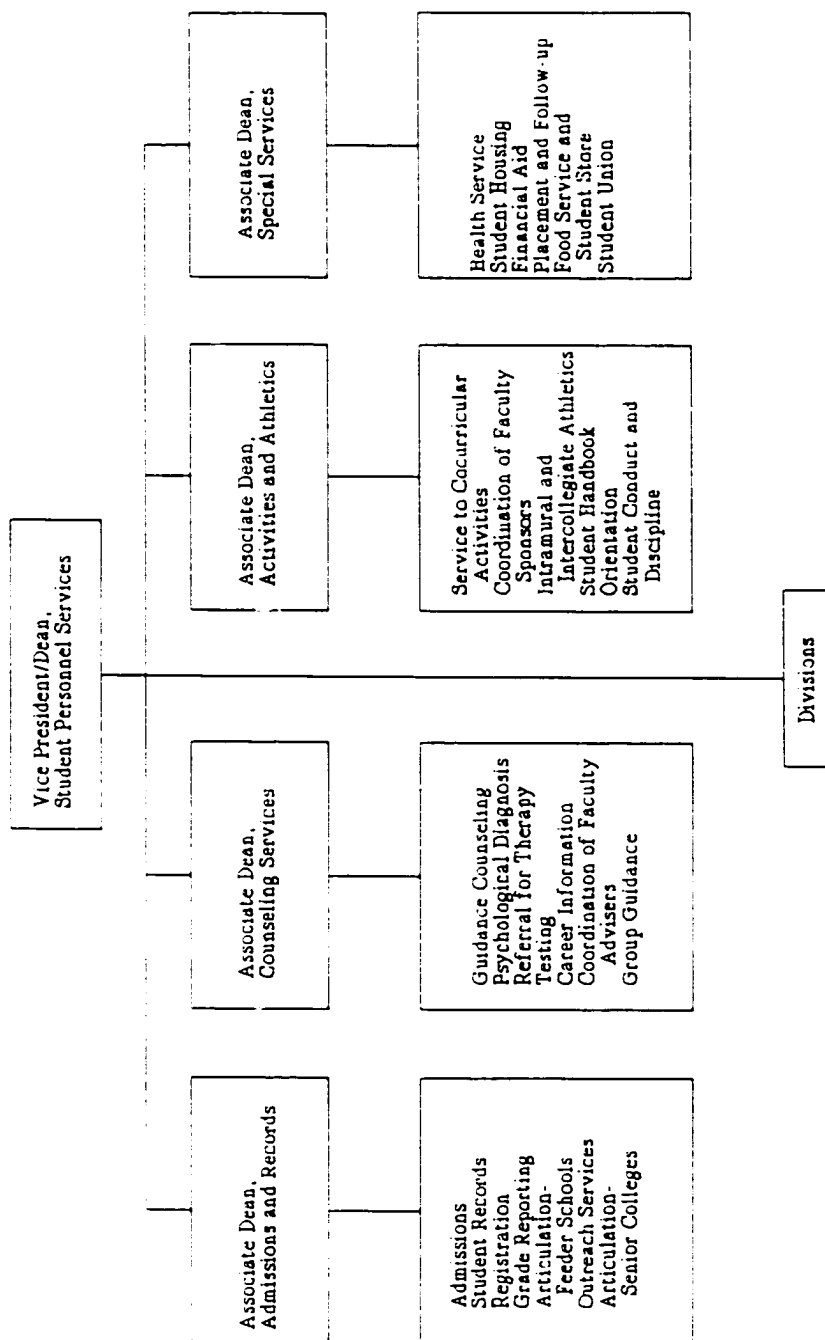


Fig. 8. Student Personnel Services Detail

Source: Richardson, Richard G., Jr., Blocker, Clyde E., and Bender, Louis W. (1972). *Government for the Two-Year College*. (Englewood Cliffs, New Jersey: Prentice-Hall.) p. 169, Figure 8.2



### Funding of the Community College

Funding of the community college is one of the preponderant aspects in its establishment. In order to make it successful, it needs adequate funding. According to Thornton (1972, pp. 95-99), the sources for funding community colleges come from tuition charges, local property taxes, state revenue, and federal grants. The American Association of Community and Junior Colleges (1988) also stated similar sources of funding. It pointed out that "in 1986, state appropriations accounted for almost half (48 percent) of the revenues received by community colleges; local government funding accounted for 23 percent; tuition accounted for 16 percent; and federal funds accounted for 7 percent" (p. 44). Other sources of funding are from local sponsor, and private gifts and grants (Evans and Neagley, 1973).

### Designing the Program for Community Colleges

Evans and Neagley (1973) stressed that in planning a community college, it should be designed with a purpose "that will truly serve its constituents into the twenty first century" (p. 98). A community college is intended to be an open-door institution that will serve both high school graduates and adult citizens who wish to continue their education. In view of the nature of its consumers, curriculum designers should therefore plan flexible programs to meet the changing needs of individuals and the society at large. Developmental or remedial, transfer, technical, and paraprofessional programs should be offered year around.

In meeting these needs, they recommended that a systematic approach to curriculum and instructional development be employed. They proposed seven steps in this undertaking:

Step 1. Identify the needs of the community that the college programs can meet. This includes survey studies on the training needs of business, industry, and other employers. A similar survey should also be conducted among students and parents. Conferences between leaders of the community and the board chairman, president, and other staff members can also be organized in this effort.

Step 2. Determine the instructional philosophy of the educational programs of the college. This is done through a systematic approach. Elements of this approach are:

- a. From the identified values and needs of society, a basic philosophy for the college is developed.
- b. General institutional objectives are specified.
- c. Curricular programs are selected and basic goals stated.
- d. For each course or learning sequence, outcomes that are to result from the teaching-learning process are defined in advance.
- e. An orderly plan or scheme is devised to move from definition of outcome to their attainment.
- f. Feedback is planned as part of the system so that evaluative information may be employed in modifying the system. (p. 99)

Step 3. With the results of steps 1 and 2, the basic educational programs to be offered by the college should then be identified. These programs include:

a. Two-year career programs that lead to an associate degree in technical and paraprofessional fields such as computer technology, secretarial science, electronics, and others.

b. Transfer programs that cover the first two years of academic requirements for a baccalaureate degree, such as in liberal arts, sciences, pre-engineering, and others.

c. Developmental or remedial programs to meet the varied needs of the students. These are intended to meet the deficiencies of students in basic skills such as mathematics, English, and other subjects.

d. Continuing education for working people who plan to upgrade their skills or earn a diploma on a part-time basis. Participants in this program also include homemakers, police officers and business executives who will attend short courses or seminars that meet their needs.

e. Certificate and noncredit programs are also offered. They are planned to meet specific needs that are not provided by existing educational and community agencies. Care should be given in coordinating this with other educational institutions in the area to avoid duplication and overlapping.

Step 4. This optional step includes the organizing of a general citizens advisory committee and other special advisory committees in the career program areas. These committees will be appointed by the board of trustees and should consist of outstanding and knowledgeable citizens who can contribute fruitful ideas to the educational programs of the college.

Step 5. Identify the basic learning sequences of each educational program formulated in step 3. These include sequencing of subject matter content and instructional methodology or courses. Graduation requirements for each program should be determined.

Step 6. Complete personnel logistical support plans for the process of instructional development. This requires the availability of essential personnel as dean of academic affairs, division chairman, and an assistant dean for instructional program development. One of these officers must be a curriculum development expert who should be able to lead the faculty in this effort. The curriculum writers are then identified and employed. Evans and Neagley (1973) recommended two options pertaining to this:

- a. Employ faculty members in the seminar and provide intensive preservice training; then organize them as functional teams for curriculum development.
  - b. Employ full-time curriculum-writing specialists to design the learning sequence or courses, and to continually revise and update them, working with the faculty.
- (p. 107)

The service of these experts may be temporary. As faculty members gain experience through their work, interaction with their students, and the learning process, they will attempt to design the learning objectives and strategies of their course program. The library is also needed to support this effort.

Materials that contain samples of learning objectives in various disciplines and curriculum guides from other institutions are needed to facilitate this task.

Step 7. Start the systematic process of instructional development for each course. The curriculum specialist should first select and organize the content to be included in the course. The learning needs of the students are considered.

### Summary

This chapter reviewed literature related to this study. The reviewed literature covered eleven areas:

1. Importance of human resource development
2. Philosophy of the community college
3. History of the community college
4. What is a community college
5. Purposes and functions of the community college
6. Theoretical framework on organization
7. Models of administration of the community college

8. Organizational structures of the community college based on bureaucratic and participational models
9. Administration of the community college
10. Funding of the community college
11. Designing programs for community colleges.

The literature revealed the trend of rapid economic, political, social, and educational development in various countries in recent decades. It also showed the preponderance of human resource development or education as an essential condition for social, political, cultural, and economic development. People should be educated and trained because they are essential resources for maintaining the economic health of a nation.

It was also noted that the philosophy of the community college in the United States was founded on the belief that all its citizens must be provided with equal opportunity through education. Each individual should be allowed to reach the highest tier of social and personal status as permitted by his/her talents. The community college was committed to provide skilled manpower to meet the rapid development needs of the United States.

The history of the community college movement originated in the United States in the late 1800s and early 1900s. Various far-sighted American educators began to expound the idea of effectively and efficiently meeting the educational, social, and

economic needs of their times which finally led to the founding of the first junior colleges. The post-World War II era saw the transformation of the junior college to the community college concept when two essential programs, adult education and community services, were added.

The community college has its own special features, which sets it apart from other institutions of higher education. It is accessible to all students. It is non-selective and has an open-door policy on admission. As it is non-residential, tuition fees are generally low. It aims to serve all citizens of its community. Its programs and services are comprehensive and intended to meet the needs of students and the employment market.

The purposes and functions of the community college are to provide transfer and terminal programs. Other programs offered by community colleges include general education, guidance and counseling, and community services.

The review also covered the theories of organization. Three theories of organization were discussed: classical, neoclassical, and modern. Key concepts such as the division of labor, bureaucracy, informal organization, and cybernetics were examined.

Management theories--namely Theory X, Theory Y, and Theory Z--were examined. How these theories were applied as models in the administration of the community college was discussed as well as how the organizational, bureaucratic, and

participational models were related to the administration of the community college.

The administration of the community college was also discussed. The roles of the board of trustees, president, and the various vice-presidents were examined. Some proposed an eclectic approach as the more effective and efficient model of administration. Others indicated their proclivity for the participational model.

The review noted the sources of funding of the community college. These sources come from tuition charges, local property taxes, state revenues, and federal grants. The role of a local sponsor as a source of funding was also noted.

How the programs of the community college were formulated was also discussed, along with various steps in initiating studies and efforts toward developing the college programs.



## CHAPTER III

### PROCEDURES AND METHODOLOGY OF THE STUDY

#### Introduction

The purpose of this study was to develop a model for the organization, administration, and programs for community colleges in Malaysia. The study also attempted to assess the need for the community college system in Malaysia. The study aimed to provide a viable solution to meet the growing educational needs of Malaysia. This chapter discusses (1) the design of the research, (2) study sample, (3) type of procedure, (4) the process of data and background information collection, (5) the instrumentations used, (6) mailing of questionnaire, (7) the analysis of data, and (8) the evaluation of the model by a panel of experts.

#### Design

This study used a multi-method approach within a developmental framework. Two basic methods, documentary and survey approaches, were used. The documentary approach involved a review of related literature, analysis of the contents of community college catalogs, and perusal of government policy materials. The survey

approach entailed the construction of the interview and survey questionnaire instruments. Two interview instruments were constructed. One was for administrators of community colleges in the State of Michigan, United States. This was intended to gather information pertaining to the organization, administration, and programs of community colleges from the experts in the field. The other interview instrument was used to obtain information pertaining to policy matters on higher education in Malaysia.

The survey questionnaire was constructed with the main objective of assessing the need for the community college system in Malaysia and ascertaining the types of course programs that are needed as perceived by selected Malaysian educators, politicians and businessmen. Descriptive statistics was used to analyze the data of the survey. Assessment was made on the results of the interview and survey to note the correlation in their responses.

Selection of the subjects for the interview and survey questionnaire was made purposefully by virtue of their position, experience, and expertise in their field of work.

From this study, the researcher developed the model for the organization, administration, and programs for community colleges in Malaysia, which was subsequently evaluated by a panel of experts. The results of the study and the model that was developed are presented in chapters 4 and 5 respectively.

### Study Samples

In this study, the researcher used judgment or purposive sample in selecting the subjects for the interview and survey questionnaire. The subjects for the interview consisted of: (1) two presidents of medium-sized community colleges, (2) one executive vice president of a large community college, (3) one vice president for academic affairs and student services of a large community college, and (4) one vice-president for financial administration of a medium sized community college. All were located in the State of Michigan. These administrators were selected because of their expertise and experience in the organization, administration, and programs of community colleges.

In Malaysia, education is a centralized affair of the Ministry of Education, located in the federal capital, Kuala Lumpur. Policies and decisions pertaining to educational matters emanate from the Ministry of Education and are channelled downward to: (1) the institutions of higher learning in the country, (2) the education department of each state, (3) the country's secondary and primary schools, and (4) other educational institutions. As this study pertains to higher education, the researcher interviewed the administrator of higher education at the Ministry of Education. He was selected for the interview because of his expertise and experience in matters pertaining to higher education in Malaysia and in governmental operations relating to formulation of policies and implementation of educational projects.

For the survey questionnaire, the researcher purposefully selected three samples of respondents in Malaysia: educators, politicians, and businessmen by virtue of their position, experience, and expertise in their respective fields. The educators were limited to selected senior education officers under the Ministry of Education, faculty members of institutions of higher learning, and secondary school principals. The politicians consisted of ministers, members of parliament, state assemblymen, and political secretaries. The businessmen were limited to board chairmen, chief executive officers, managing directors, and general managers of large corporations. The educators were educational leaders and implementors of the country's education and training programs. The politicians were political leaders, policy makers, planners, and implementors of national development plans. The businessmen were corporate leaders and implementors of the economic plans and programs of the country.

In view of the difficulty in obtaining the addresses of and the disparity in the population of these three groups of leaders, the researcher, after consultation with the researcher's doctoral committee at Andrews university, decided arbitrarily on a sample size of 100:60:60 for the educators, politicians, and businessmen respectively. This was due to the fact that there are more educators than politicians or business leaders of large corporations in Malaysia.

### Type of Procedure

This study is developmental in nature. McGrath (1970, p. 20) defined developmental research as "the use of scientific knowledge for the production of useful materials, devices, systems, methods or processes, exclusive of design and production engineering." Nedler and Gephart (1972, p. 25) concurred with this concept when they stated that "the purpose served by the developmental process is the creation of tools and procedures needed to do work in a specific environment."

In a world of dynamic change, any organization--especially one with such complex and significant responsibilities as a community college or any other institution of higher learning--needs to plan for change and to structure its organization to respond effectively to a changing environment. Planning in this context is not just providing the facilities, personnel, and other resources to meet projected functions, but rather is "the process of preparing for the commitment to be made less disruptively" (Kirby, 1966, p. 21).

In attaining effective planning, a systems approach should be adopted. This approach means that logical boundaries must be drawn around each system of the overall community college for effective and efficient operation.

Kaufman (1971) stipulated a process of planning and developing organizational and administrative strategies that may be used in planning and developing a community college. It consists of six functions: "(1) identify the

problem; (2) determine solution requirements and solution alternatives; (3) select solution strategies and tools; (4) implement; (5) determine performance effectiveness; and (6) revise as required" (p. 251).

For the purpose of this study where a model will be developed rather than an actual community college, Kaufman's steps have been modified as follows:

#### Step 1: Identify the Problem

The first step in the suggested model was to identify the problem, based on documented needs. This was done in chapter 1 by presenting the need for expanded institutions of higher learning in Malaysia to cater to growing secondary school graduates and increasing demands for skilled manpower of the industrial, commercial, agricultural, and professional sectors and to meet the country's goal of becoming a developed nation in the twenty-first century.

#### Step 2: Determine Solution Requirements and Alternatives

The basis for determining the solution requirements and alternatives was formed by (1) a review of the literature, (2) visits to community colleges in Michigan and interviews with their senior executives pertaining to the organization, administration, and programs of community colleges, (3) responses from Malaysian educators, politicians, and businessmen regarding their perceptions on the need for community

colleges that could enhance and facilitate the process of meeting the country's growing demand for skilled manpower, and (4) an interview with the administrator of higher education of Malaysia. This was discussed in chapters 2 and 4 of this study.

### Step 3: Select Strategies and Tools

From the information in the previous steps, the selection of appropriate tools and strategies was accomplished. This chapter specifies the procedures for collection of data and the type of research.

### Step 4: Development of the Model

Based on the review of related literature and other facts as specified in Step 2, a model for the organization, administration, and programs for community colleges in Malaysia was developed. This will be provided in chapter 5.

### Step 5: Evaluation of the Model

Kaufman (1971, pp. 251-252) suggested that:

Any time a performance requirement is not met, necessary revision is required. . . . It should be noted that in the suggested model, revision may be required at any step, or point, in problem solving--it is not necessary to commit to a "disaster plan" and have to wait until the plan has been fully implemented to institute required changes.

The model was submitted to a panel of experts in community colleges to help make an objective evaluation.

### Step 6: Revision of the Model

The model was revised and refined based on the suggestions of the panel of experts.

### Sources of Data

In pursuing relevant literature pertaining to the topic of this study, a search of various sources was made which included the following:

1. Card catalogs in the libraries of Andrews University, Western Michigan University, and Ohio State University
2. Educational Resources Information Center (ERIC)
3. Dissertation Abstracts Index to American Doctoral Dissertations
4. Inter library loan
5. Clearinghouse for Junior Colleges, University of California, Los Angeles
6. Literature from Malaysia.

A computerized check of dissertations on the subject matter was also made through Direct Access to Reference, a Xerox Service (DATRIX) of University Microfilms.



### Gathering Background Information

In gathering the necessary data or information, the researcher took the following actions:

1. Reviewed the literature as widely as possible pertaining to the development, philosophy, history, purposes, functions, organization, administration, and programs of community colleges in the United States

2. Reviewed literature pertaining to theories of organization and administration

3. Reviewed literature pertaining to the history of Malaysia, its economy, educational development and trend, and its long-term development plans such as the Sixth Malaysia Plan 1991-1995 and National Development Policy 1991-2000

4. Visited five community colleges in Michigan and interviewed their senior administrators on matters pertaining to their organization, administration, and programs (They ranged from medium sized (5000 students) to large sized (23,000 students). These included Lansing Community College, Lansing, Michigan; Grand Rapids Community College, Grand Rapids, Michigan; Kellogg Community College, Battle Creek, Michigan; Southwestern Michigan College, Dowagiac, Michigan; and Lake Michigan College, Benton Harbor, Michigan. Necessary materials such as brochures, college catalogs, organizational charts, and campus layouts were gathered. The organizational charts and campus layouts are in appendices J and K.)

5. Visited Malaysia to interview the administrator of higher education at the Ministry of Education in Kuala Lumpur. (During the trip the researcher also mailed the survey questionnaire to selected Malaysian educators, politicians, and businessmen to assess their perceptions pertaining to the need for community colleges in Malaysia and the types of course programs that they deemed essential to meet the country's growing needs for skilled manpower. This visit was made to accomplish three purposes. First, to gather relevant and essential literature pertaining to Malaysia. Second, to assess the government educational policy on institutions of higher learning. Third, to ascertain the need for community colleges in Malaysia.)

From the review of related literature, visitations of community colleges in the United States, meeting with the administrator of higher education at the Ministry of Education in Malaysia, and the questionnaire data from educators, politicians, and businessmen in Malaysia, the researcher organized this study under the following considerations:

1. Rationale for community colleges in Malaysia.
2. Functions, programs, and services of community colleges in Malaysia.
3. Organization and administration of the community colleges in Malaysia, covering the power structure, staffing, job description, and qualifications.

After the information was summarized, a tentative design was developed for a model of the organization, administration, and programs for community colleges in

Malaysia. In developing this model, the researcher took into consideration the country's overall economic, social, and educational development plans and policies.

### Instrumentation

Two kinds of instruments were used. They were survey questionnaires and interview questions (see appendices C, E, and F). The questions and items in these instruments were developed based on the review of literature. They also were reviewed by members of the researcher's dissertation committee.

In ascertaining the appropriateness of the survey questionnaire, the researcher sent it to the following six senior officers at the Department of Education in Sabah, Malaysia:

1. Assistant Director for Education Technology
2. Divisional School Inspector
3. School Inspector
4. Deputy Principal Assistant  
Director for Education Technology
5. Assistant Director of Education for Vocational and  
Technical Schools, and
6. Assistant Director for Student Affairs.

They all responded favorably regarding the appropriateness of the survey questionnaire.

These instruments were also approved by the researcher's doctoral committee.

The interview questions for the administrators of community colleges in the State of Michigan sought their expertise on the organization, administration, and programs of community colleges. The interview questions for the administrator of Higher Education of Malaysia, attempted to assess government policy on higher education along with the short-and long-term projected skilled manpower needs and projected secondary school outputs of Malaysia.

The survey questionnaire was prepared to determine the perceptions of selected Malaysian educators, politicians, and businessmen, concerning the need for the community college system as a viable and complementary form of higher education in Malaysia. In addition, the survey also attempted to gauge their perceptions of the importance and need of the various course programs that would meet the skill requirements needed by the various sectors of the economy in Malaysia.

#### Mailing of Questionnaire

During the research trip to Malaysia in July 1991, the researcher mailed a questionnaire packet to each of the selected 100 educators, 60 politicians, and 60 businessmen.

The packet contained:

1. A personalized instructional letter from the researcher (see appendix A)
2. A personalized cover letter from Dr. Bernard M. Lall, the chairman of the researcher's doctoral committee at Andrews University (see appendix B)
3. A questionnaire (see appendix C)
4. A stamped self-addressed envelope.

A letter of reminder (see appendix D) was subsequently sent to thank those who had responded and to remind those who had not yet returned their questionnaires.

At the cut-off date of November 10, 1991, 44 educators, 30 politicians and 25 businessmen had responded. This represented an overall return rate of 44% for the educators, 50% for the politicians, and 42% for the businessmen.

### Data Analysis

An examination was made of the catalogs of the community colleges that were visited and other related literature pertaining to the organization, administration, and programs of community colleges. The responses to the questions in the interviews were also noted. The data received from the administrators of community colleges were compared to determine the correlation in their responses.

The statements of the administrator of Higher Education of Malaysia were assessed to determine government policy toward the viability of a community college system to complement extant institutions of higher learning in the country. Responses

to the questionnaire items were computer coded and then analyzed by chi-square test of homogeneity using Statistics Analysis System (SAS, Inc., 1990).

Ferguson and Tahane (1989, p. 214) stated:

In situations where sets of observed and theoretical frequencies are to be compared, chi square ( $\chi^2$ ) is defined by

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$

where O and E denote the observed and expected, or theoretical, frequencies respectively. . . .  $\chi^2$  is a descriptive measure of the magnitude of the discrepancies between the observed and expected frequencies.

This analysis enabled the researcher to determine the attitude of Malaysian educators, politicians, and businessmen pertaining to the importance and need for community colleges in Malaysia and course programs that will help to facilitate the country's effort to meet the increasing demand for skilled manpower.

The general requirement for proper application of the statistic is that not more than 20% of the cells have expected frequencies less than 5 (Hinkle, Wiersma and Jurs, 1988; Hopkins, Glass and Hopkins, 1987). However, less stringent criteria have been suggested. For example, Cochran (1954) stated that if chi-square has less than 30 degrees of freedom and the minimum expected frequency is 2 or more, the application of chi-square is adequate. Hopkins, Glass and Hopkins (1987) referred to several studies where chi-square works well even when the average expected frequency is as low as 2.

To meet these criteria, column cells were combined for a number of items. The combination was done with the condition that the data do not become distorted. Chi-square values with less than 4 degrees of freedom suggest some cells were combined to achieve appropriate expected frequencies. Details of whether or not column cells were combined and in what manner, are noted in the text.

This study involves multiple computations of chi-square statistics which tend to increase the probability of Type I error rate. For this reason, the level of significance was set at 0.01 rather than the customary 0.05.

#### Panel of Experts

From this study a model for the organization, administration, and programs for community colleges in Malaysia was developed. After the model was developed, it was submitted to a panel of five experts in community colleges for an objective evaluation. A letter (appendix G), the proposed model, and a stamped, self-addressed envelope were sent to the panel members.

An assessment of the reactions revealed that the panel agreed with the basic concepts in the model. Their comments and suggestions were noted and the necessary revisions were made accordingly. Their letters are in appendix H.

The panel members comprised the following:

President  
Lake Michigan College, Michigan

Executive Vice President  
Grand Rapids Community College, Michigan

President  
Southwestern Michigan College, Michigan

Vice President for Administration and Finance  
Kellogg Community College, Michigan

Director of Admissions  
Henry Ford Community College, Michigan

### Summary

The purpose of this chapter was to establish the procedure that was used in this study. It discussed the process for planning and developing a community college. Six steps were provided in the planning process: (1) identify the problem, (2) determine solution requirements and alternatives, (3) select strategies and tools, (4) develop the model, (5) evaluate the model, and (6) revise the model. Sources of data and procedures for validation of the model were presented. The design, sample, instrumentation, and analysis of data were discussed. Evaluation of the model by community college experts was also stated.

Chapter 4 presents a brief background study of Malaysia, covering such topics as the country, people, economy, government, and education. It will also discuss data collected from visits to community colleges in Michigan. Data gathered from survey questionnaires conducted in Malaysia will be analyzed and presented.



## CHAPTER IV

### BACKGROUND, PRESENTATION AND ANALYSIS OF DATA

#### Introduction

This chapter consists of three parts. First, it provides brief background information on Malaysia. Second, it describes the organization and administration, mission and objectives, and programs of the community colleges visited in Michigan. Third, it presents the analysis of the data obtained from the survey questionnaires that were sent to Malaysian educators, politicians, and businessmen. It is also the purpose of this chapter to assess the feasibility of the community college system in Malaysia and to determine the kinds of course programs that should be offered by these community colleges as perceived by the three groups of Malaysian leaders.

#### The Country

Malaysia (see map in appendix O) covers a total land area of approximately 329,758 square kilometers (127,320 square miles) which is about the same size as Vietnam or the Philippines. As mentioned in chapter I, Peninsular Malaysia is located

between south of Thailand and north of Singapore. East Malaysia, consisting of Sabah and Sarawak, is located on the island of Borneo.

As Malaysia is located just north of the equator, it has a hot and humid tropical climate with rain in all seasons and temperatures varying between 22° C (72° F) and 33° C (92° F) throughout the year. The topography consists of coastal swamps, mountain ranges in the interiors, and numerous rivers and narrow plains in between. The highest peak in the main mountain range is Korbu Mountain which rises to 2,188 meters (7,179 feet). The highest mountain on the entire Peninsula, however, is Tahan Mountain in Pahang which rises to 2,207 meters (7,241 feet) (Hirschman, 1985).

The large plains in Kelantan and Kedah are cultivated with padi (irrigated rice). Most of the lowland areas are covered by hills and fragmented by rivers and small streams. Its eastern coast faces the South China Sea while its western coast is sheltered from the Indian Ocean by the island of Sumatra (Indonesia).

Sabah and Sarawak (East Malaysia) face the South China Sea. To the east of Sarawak and the south of Sabah, they share a common border with Kalimantan (Indonesian Borneo). The topography of Sarawak shows a flat coastal plain which rises to a belt of hills and a mountain range which borders on Kalimantan. The highest mountain in Sarawak is Murud Mountain which rises to 2,425 meters (7,956 feet) at the junction of Sarawak, Sabah, and Kalimantan. The shallow coastal waters of Sarawak obstruct the passage of large vessels upstream. The muddy beaches are covered by

mangrove and nipa palm swamps which do not attract much economic activity. Sarawak has numerous rivers which meander their way from the interior through gorges to the coastal plains and the sea.

Sabah is also landscaped with high mountain ranges along its western coastline. The coastal plain on the west, lying between the South China Sea and the mountain ranges, stretches only 16 to 32 kilometers (10 to 20 miles). The Crocker Range, which is the main mountain range, is thought to be the "southeastern extension of the chain that created the islands of the Philippines" (p. 70). The highest mountain, called Kinabalu Mountain, rises to 4,103 meters (13,462 feet) in height. Sabah is also drained by many rivers which empty into the South China Sea to the west and the Sulu and Celebes Seas to the east. The longest and largest river is Kinabatangan River, which stretches 564 kilometers (350 miles) from the southern part of the Crocker Range to Sandakan Bay (Hirschman, 1985).

### The People

The people of Malaysia are a conglomeration of various races whose ancestors had settled in Malaysia over the centuries. Early settlements in small villages along the sea coast began as far back as 1500 years ago. The Malays, who were thought to have originated in south-central Asia, migrated southward to the Malay Peninsula and the Malay Archipelago in prehistory.

Over the centuries, the Indians and Chinese had also settled in Malaysia. As early as the 16th century, European impact began to be felt in Malaysia. Attracted by the spice trade and Malaysia's mineral resources such as gold, tin, and iron ore, European traders had competed to gain their foothold in Malaysia. First, the Portuguese captured Malacca in 1511. In 1641, the Dutch drove the Portuguese out of Malacca and established themselves as the new masters of the thriving trade center. The Dutch were mainly interested in exploiting the tin in the Malay Peninsula. The British arrived on the island of Penang in 1785. From then on, the British became the dominant colonial rulers of Malaysia until Malaya (now known as Peninsular Malaysia) gained its independence in 1957. As noted earlier, Sabah and Sarawak became independent from British colonial rule and joined the Federation of Malaysia in 1963 (Seekins, 1985).

Being a plural society, various languages are spoken in Malaysia. The national language, however, is Malay (Bahasa Malaysia). English remains an important language that is still used widely among the middle class in the urban centers. Various Chinese and Indian dialects are also used widely "in households and in informal communities, as well as in schools, the mass media, and in ethnic associations" (Hirschman, 1985, p. 107).

Islam is the official religion of Malaysia. However, the Constitution provides freedom for any person who prefers and practices his or her own religion. The

Malays are Muslim and "propagation of any other religion to Muslims is forbidden by state laws" (p.110). Other religions practiced by the various ethnic groups in Malaysia include Buddhism, Taoism, Confucianism, Hinduism, and Christianity.

### The Economy

According to Wickman (1985, p. 131), "low population densities and abundant natural resources have blessed the Malaysian economy . . . since the nineteenth century, when it began to modernize." In 1989, Malaysia's gross national product (GNP) was US \$31,620,000 which is equivalent to US \$1870 per head. From 1980 to 1988, GNP increased in real terms at an average annual rate of 4.02%, while real GNP per head increased by 1.3% per year. During the same period, the population increased by an annual average of 2.6%, while the gross domestic product (GDP) also increased, in real terms, by an annual average of 4.5% (Europa World Yearbook, 1990).

Agriculture, which includes forestry and fishing, contributed 20.9% of the GDP, and employed an estimated 31.3% of the working population. Malaysia is the world's leading producer of natural rubber and palm oil. Other cash crops include cocoa, pepper, coconuts, tea, and pineapples. Logs and timber are the main sources of foreign exchange.

Industry, which includes mining, manufacturing, construction, and power, contributed 39.4% of the GDP and employed about 23.9% of the working population.

From 1980 to 1987, industrial production increased by an annual average of 5.8%. In 1988, the estimated proven gas reserves in Malaysia stood at 54,000,000 million cubic feet, while petroleum reserves stood at 3,200 million barrels. Exports of crude petroleum provided 11% of the total export earnings in 1988. Malaysia is also one of the world's leading tin producers. Other minerals mined include bauxite, copper, and iron.

Manufacturing is the largest export sector which contributed 24.1% of the GDP and employed 16.6% of the working population in 1988. The main manufacturing branches include food products, electrical machinery, chemical products, metals, and rubber products.

The major exports in 1988 were petroleum, natural gas, rubber, palm oil, timber, and tin, while imports consisted of machinery and transport equipment, basic manufactures, chemicals, and food (Europa World Yearbook, 1990).

### The Government

Malaysia has a constitutional monarch who is "the titular sovereign of the federation" (Shinn, 1985, p. 142). The federal government is headed by the prime minister who also heads the largest political bloc in parliament. Under the constitution, the power of the government is divided into the executive, legislative, and judicial branches. The Constitutional monarch is also the highest official of the federation. He

is known as the Yang di-Pertuan Agong (paramount ruler), or the supreme head of the federation. His power is largely ceremonial. He is elected for a 5-year term by the nine hereditary sultans of the federation. He is vested nominally with the executive authority of the federation, and all laws are presumed to be promulgated and executed in his name. However, he must act on the advice of the prime minister. When requested by the prime minister, he may convene, prorogue, or dissolve parliament. As a formality, he appoints the prime minister who is the leader of the majority party, or coalition parties, in the lower house of parliament.

The head of the government is the prime minister. He presides over the cabinet, which is the highest policy making body. The cabinet members are chosen from among members of parliament. Collectively, the cabinet is responsible to parliament and if the prime minister loses the confidence of the lower house, he must either resign with his cabinet or request the Yang di-Pertuan Agong to dissolve parliament. He is responsible for keeping the Yang di-Pertuan Agong informed of the general administration of the federation and for advising him on the appointment of judges, the auditor general, and members of the public services commission and election commission. He is also empowered with the authority to appoint civil servants to senior posts. In his absence, the deputy prime minister will discharge his duties. The deputy prime minister is a member of parliament and is also the deputy to the president of the dominant ruling political party.

The Prime Minister's Department supervises the policies and actions of the various ministries. This department is the most pivotal focus within the bureaucracy, and manages the administrative needs of the cabinet, the appointment of high ranking officials as governors, the senate president, the speaker of the House of Representatives, ministers and deputy ministers of the federal government, members of the Senate, parliamentary and political secretaries, and judges. The prime minister's office also handles protocol, general services, administrative reforms and manpower planning, socio-economic research relevant to economic development planning and living conditions, statistics, public complaints, petroleum development, and national security affairs. It also monitors and evaluates the implementation of the New Economic Policy (NEP) project through its Economic Planning Unit, which is the central staff agency for national socio-economic development planning.

Parliament consists of two houses: the Senate (Dewan Negara) and the House of Representatives (Dewan Rakyat). The Senate has 68 members, 26 of whom are elected by the legislatures of the 13 state governments; the rest are appointed by the Yang di-Pertuan Agong on nomination by the prime minister. The nominees are reelected based on their distinguished public services. The Senate is not affected by the dissolution of the lower house. Their members serve for a 6-year term. The House of Representatives has 176 members who are elected by their constituencies and serve for a 5-year term. Each house selects its own officers. The Senate has a president and



deputy president. The House of Representatives has a speaker and deputy speaker.

The judiciary is an independent body under the federal jurisdiction. Its bench consists of the lord president (the chief justice) and two senior judges (called chief justices) of the two high courts plus four other judges. Its jurisdiction covers decisions of the high court, the constitutionality of laws enacted by the federal or state legislatures, disputes between states or between the federal government and any of the state governments, and constitutional questions referred to it by a lower court. It also provides advisory opinions to the Yang di-Pertuan Agong on matters pertaining to constitutional issues.

The State government is patterned after the Federal government organization. The rulers (or sultans and governors) are titular heads at the state level. In the 9 states of Peninsular Malaysia--Johore, Kedah, Kelantan, Negeri Sembilan, Pahang, Perak, Perlis, Selangor, and Trengganu--the heads are chosen through the customary practices of each dynasty. The ruler of Negeri Sembilan is elected from, and by, local Malay chiefs. Seven of these heads are called sultans. The rulers of Perlis and Negeri Sembilan are known as raja and yang di-pertuan besar, respectively. Their terms of office are for life.

In Malacca, Penang, Sabah, and Sarawak, the heads of states are called governors. While they are represented in the Conference of Rulers, they do not participate in discussions pertaining to the sultans or the election of the Yang di-Pertuan Agong.

The executive head of the state administration is the chief minister. He represents the political party with the majority vote in a state election. Although the state titular head appoints him as chief minister, it is only ceremonial. The chief minister cannot be removed from office except through a vote of no confidence against him by the state legislative assembly (Shinn, 1985).

### The Education

The history of education in Malaysia can be traced to the arrival of the British in the 18th century. Prior to this, there was no organized form of education. However, there were the Quran schools in Peninsular Malaysia where children were taught to read and pray in Arabic.

As a multiethnic society, Malaysia's educational development can be seen against its ethnic, religious, and economic background. During the British colonial rule, two types of schools emerged: the vernacular schools and the English schools. The vernacular schools consisted of the Malay vernacular, the Chinese vernacular, and the Tamil (Indian) vernacular.

The Malay vernacular schools started from the Quran schools. In these schools, children were taught prayers in Arabic. They were also taught to read and write in Arabic. With the advent of Islam in the region at the end of the 14th century, Muslim missionaries established the Quran schools. The religious teachers were called

Sheikh, Syed, or Ustaz. Often the Quran schools were held at the teachers' houses or in mosques. There were no Malay schools where Malay was the medium of instruction. However, by 1821, the use of Malay as a medium of instruction was used in the Penang Free School. In 1871, A. M. Skinner, the inspector of schools, formalized the establishment of Malay schools. The early Malay schools, which began in the Quran classes and developed into Government Malay schools, were the precursors of Malaysia's national primary schools.

The Chinese vernacular schools were established in the early 1800s. Pupils were mainly taught letter writing and the use of the abacus. Tamil vernacular schools were also started around this period. The children attending these schools were Chinese and Indians, and many of them were also enrolled in the English schools in the towns. In 1876, the government withdrew its support for the Chinese and Indian vernacular schools. It, however, continued to support the English and Malay vernacular schools because English was the "commercial language of the country, and Malay the lingua franca of the race whose interests they felt their duty to safeguard" (Wong & Gwee, 1972, p. 10).

The early English schools in Malaysia consisted of the "free" schools and the grant-in-aid schools. The first "free" school was Penang Free School, founded in 1876 by Reverend R. S. Hutchins. The grant-in-aid schools were established and maintained by Christian missions such as the London Missionary Society, the American Methodist

Mission, and the Roman Catholic Mission. These schools were open to all races and creeds. Their main objective was to provide general education and a better standard of moral life based on Christian tenets.

In 1901, a Malay teachers' training college was set up in Malacca to meet the growing demands for Malay teachers in the Malay vernacular schools. In 1922, another Malay teachers' training college was established in Perak. Meanwhile, the Chinese, Tamil, and English schools also began to establish their own teachers' training schools to meet the increasing demand for trained teachers.

Efforts to motivate students to continue their education in the English schools was made with the introduction of the Queen's Scholarship, founded in 1885. Able students who performed well in the overseas Cambridge School Certificate Examinations were awarded with scholarships to enable them to continue their education in England.

Economic factors on education influenced the government in setting up vocational schools. As Wong and Gwee (1972) pointed out, "The need for more vocational training was a corollary to the fact that the interests of the British in this region were mainly commercial" (p. 20). By the early 1900s, vocational education was introduced in the school system. In 1918, the Lemon Committee, which was entrusted with the task of providing technical and industrial education in the country, recommended the establishment of a technical and an agricultural school near Kuala Lumpur and the setting up of trade schools.

Another committee, known as the Maxwell Committee, in 1918 was asked to develop a scheme for higher education in Malaya (now known as Peninsular Malaysia) which would lead to the establishment of a university. Three steps were formulated: "first the establishment of technical and higher grade school; second, the provision of Sciences and Arts Colleges; and third, the University itself, residential, with powers to confer degrees in Science and Arts" (pp. 22-23). Subsequently, the Raffles College was founded which was to be the future University of Malaya. The college was intended to train teachers and provide facilities for training in the technical and science fields.

From 1946 to 1965, education took a new direction as it responded to growing nationalism during the post-war era. Countries in the region, including Malaysia, gained their independence from their colonial rulers. The new leaders began to look upon education as one of the chief instruments of fostering national consciousness. Educational reform was also seen as an essential element in unifying the various races "to form a common nationality" (p. 24).

By 1971, the educational structure in Malaysia consisted of 6 years of primary education, 3 years of lower secondary, 2 years of upper secondary, and 2 years at the pre-university level. After completing the lower secondary level, students may proceed to the upper secondary level through three routes: academic, vocational, and technical. The academically inclined students proceed on the academic route to the

upper secondary and pre-university levels and finally to university. Others are channelled to vocational and technical schools.

Institutions of higher learning in Malaysia have also expanded. By 1987, higher education in Malaysia consisted of 28 teacher-training colleges, 7 universities, and 5 polytechnic schools (Europa World Yearbook, 1990).

Educational institutions in Malaysia have continued to play an important role in the country's development. The Sixth Malaysia Plan 1991-1995 emphasized that human resource development would be a major thrust in achieving the country's socio-economic goal, which depended on the availability of educated, skilled, and trainable manpower. Thus, education and training programs would be expanded and improved to provide individuals with knowledge and skills, and also produce responsible citizens with high morals. Education and training would be used to eradicate poverty and restructure society. Education would be made readily available to the low-income or disadvantaged groups to help them to increase their income and employment opportunities. It is the focus of the Sixth Plan to improve the quality of education and its delivery system so as "to enable the low-income group and the under-served regions to have greater access to education and training" (p. 157).

At the lower secondary level, students undergo a national public examination called Sijil Rendah Pelajaran (SRP). Those who performed well and are academically inclined proceed to the academic route at the upper secondary level where

they will undergo another national public examination called Sijil Pelajaran Malaysia (SPM) before proceeding to pre-university level. At the pre-university level, they will also sit for a national public examination called Sijil Tinggi Pelajaran Malaysia (STPM) for entrance to a college or university.

Those who are not academically inclined are routed to the vocational upper secondary school level after the SRP for the 2-year course leading to Sijil Pelajaran Malaysia Vokasional (SPMV). The SPMV is recognized as equivalent to the academic SPM in terms of basic qualification for jobs in the public sector. It is also a prerequisite for students to "pursue their education at the tertiary level" (p. 162).

Under the Sixth Plan, extant institutions of higher learning would be expanded. More courses in the engineering fields would be offered. Post-graduate academic programs in the fields of applied arts and sciences and technology would also be expanded.

#### Community Colleges Visited in Michigan

Five community colleges in Michigan were visited and the following information pertaining to their organization and administration, mission statement and objectives, and course programs was gathered from the interviews with their administrators and reviews of their college catalogs. Their organizational charts and campus layouts are in appendices J and K, respectively.

## Lansing Community College

### **Structure**

Lansing Community College has a board of trustees and a president. Under the president is the executive vice president. Reporting to the executive vice president are the vice presidents for business and finance, academic and student affairs, and research, planning, and development. Under the vice president for business and finance are the directors for (1) accounting and payroll, (2) business services, (3) information systems and computer services, (4) physical plant, (5) public safety, and (6) purchasing. Under the vice president for academic and student affairs are the deans for (1) arts and sciences, (2) student personnel services, (3) technology and applied sciences, (4) business, and (5) telecommunication and the arts. Under the vice president for research, planning, and development are the directors for (1) Lansing Community College foundation and alumni, (2) resource development, (3) public relations, and (4) publication.

### **Objectives**

In its statement of commitments, Lansing Community College stated that it has evolved from a partnership of the community, student, faculty, and staff. The college is committed to the idea that education is a lifelong process. Due to the diverse personal and career needs of students, they demand from the institution, relevant instruction, flexible scheduling, and individualized services. It is therefore the belief of



the college that it must respond to its students with instruction that has quality, timeliness, and relatively low cost. In meeting this commitment, the college works with business, industry, labor, government, community agencies, and educational institutions.

The college is also committed to career training programs, college transfer programs, basic skills programs, personal and professional seminars, business and industry support programs, and community service programs. It is committed to the idea that the individual and the community are best served when the programs and courses assist students to integrate learning with experience. The programs and courses are designed to help students achieve career, social, and personal competencies through the mastery of skills and the study of contemporary and historical human values.

The college is committed by purpose, structure, and resources to provide a learning environment that is supported by experienced faculty and staff of professional educators and specialists from business, industry, labor, and government. With its open admissions policy and a wide variety of courses and programs, the college is sensitive to and aware of its diverse student population and pledges equal educational opportunity to all in its service area (Lansing Community College Catalog 1991-1992).

In meeting these commitments, the college does the following:

1. Maintaining continuous review and evaluation of the essentials of an effective learning environment--instruction, resources and facilities--so that the learning programs have quality and

relevance to the individual and the community.

2. Supporting an educational environment that permits a person not only to acquire a mastery of skills of career goals but also to enhance self identity and clarify personal values.
3. Developing and supporting faculty and staff committed to academic excellence and professional competence in instructional development and delivery.
4. Providing student services including counseling, employment placement, financial assistance, informational services, tutorial assistance and college entry services according to the student's academic, vocational and personal needs.
5. Providing opportunities for students to develop leadership and social interaction skills through formal and informal student activities.
6. Making available a general education program to students.
7. Providing developmental programs for students to achieve basic competencies in reading, writing and mathematics and to update those skills necessary to function in this highly technical world.
8. Providing career-oriented courses and programs for students now employed or contemplating employment.
9. Providing courses and curricula in the arts, sciences, business and other pre-professional programs that will articulate with degree programs at other colleges.
10. Conferring certificates and associate degrees.
11. Developing and offering specialized training through consultative relationships with business, labor, industry and government.

12. Providing learning resources and instructional support services that meet the diverse information needs of students, staff and community.
13. Providing programs and activities that enhance the community's cultural life and economic well being.(p. 3)

## **Programs**

Lansing Community College's Division of Arts and Sciences offers developmental, transfer, and general education which includes the following programs:

Communication

Humanities

Mathematics and Computer Science

## **Science**

Anatomy

Astronomy

Biology

Chemistry

Geology

Meteorology

Microbiology

Natural Science

Oceanology

Physiology

Physics

Science Seminars and Independent Study

## **Social Science**

Child Development

Education

Geography

Human Services

Political Science

Psychology

Sociology/Anthropology

Social Science

Social Work

Transfer programs for business are also available to students.

Its **occupational programs** under the Division of Business and Division of

Technology and Applied Sciences are as follows:

**Division of Business**

- Accounting
- Banking
- Computer Applications Systems
- Computer Operations
- Computer Programming
- Computer Software Systems
- Computer Systems Analyst
- Corrections
- Court Administrator
- Court Reporting
- Credit Union Operations
- Data Entry
- Financial Planner
- Food specialist
- General Clerical
- Hotel-Motel Management
- Insurance
- International Business
- Labor Relations/Personnel
- Law Enforcement
- Legal Assistant
- Legal Secretary
- Management
- Marketing and Sales
- Medical Secretary
- Medical Transcriptionist
- Property Assessment
- Real Estate
- Registered Chef
- Secretary
- Security
- Small Business Management
- Stenographer
- Transportation Management
- Travel Agency
- Word Processing

### **Division of Technology and Applied Sciences**

Advanced Emergency Medical Technology (Paramedic)  
 Architectural Technology  
 Automotive Technology  
 Auto Body Repair  
 Avionics Technology  
 Aviation Flight Technology  
 Aviation Maintenance Technology  
 Body Design, Industrial Drafting  
 CAD/CAM Engineering Technician  
 Chassis Design, Industrial Drafting  
 Civil Technology  
 Computerized Numerical Control  
 Dental Assistant  
 Dental Hygiene  
 Diagnostic Medical Sonography (Ultrasound) Technology  
 Diesel Engine Technology  
 Electrical Technology  
 Electronics Technology--Communications Option  
 Electronics Technology--Biomedical Option  
 Electronic Technology--Digital Option  
 Fire Science Technology  
 General Maintenance  
 Heating, Air Conditioning, and Refrigeration  
 Industrial Automation  
 Industrial Drafting Technology  
 Industrial Technology  
 Interior Architectural Design  
 Landscape Architectural Technology  
 Machine Maintenance  
 Machinist Toolmaker  
 Nursing (Career Ladder LPN-RN)  
 Production and Inventory Management  
 Quality Control Technology  
 Radiation Therapy  
 Radiologic Technology  
 Respiratory Therapy Technology  
 Residential Building  
 Welding Technology

Its **certificate programs** which vary in duration from a few days to an

extensive program requiring additional work to the associate degree (2-year program)

include the following:

- Auto Body Repair
- Auto Mechanics
- Computer Repair Technician
- Dental Assistant
- Dental Business Assistant
- Diagnostic Medical Sonography (Ultrasound)
- Die Maker--Tool and Die Maker
- Diesel Engine Technology
- Machine Repair
- Machinist/Toolmaker
- Medical Assistant
- Millwright
- Pipefitting
- Nursing (Career Ladder LPN)
- Radiation Therapy Technology
- Residential Builder
- Respiratory Therapy
- Small Engine Repair
- Surgical Technology
- Truck Driver Training
- Welding

### Grand Rapids Community College

#### **Structure**

Grand Rapids Community College has a board of trustees and a president. Reporting to the president are the executive vice president, chief financial officer, executive director for strategic planning, chief development officer, executive director for quality management/new product development and dean of institutional research. Under the executive vice president are (1) the executive director of personnel/affirmative action officer, (2) dean of student services, (3) vice president of instruction.

(4) vice president for community outreach, (5) director for security, and (6) director of food services. Under the chief financial officer are (1) the executive director of financial services, (2) director of facilities, and (3) director of purchasing and auxiliary services. Under the dean of institutional research are (1) the registrar, (2) director of financial aid, and (3) director of data processing.

### **Objectives**

In its mission statement, Grand Rapids Community College stated that recognizing that learning, wisdom, and skill of the citizens of a free society are essential to keep it free, it offers its resources to foster learning, wisdom, and skill in arts, sciences, and occupational education. Due to the diversity of individuals and their educational needs, the college provides an open-door policy and attempts to offer course programs which will meet different needs. The college offers the following courses and programs for (Grand Rapids Community College Catalog 1991-1992):

1. students--both occupational and liberal arts--who wish to transfer to four-year institutions.
2. students who wish to earn a one- or two-year certificate or a degree but may intend not to transfer.
3. students who need developmental studies to help them develop basic skills to succeed in regular college courses.
4. students who wish to train for new skills needed in their trade or profession or who wish to enter other trades or professions.

5. students who are interested in learning for its own worth, in exploring new ideas in broadening their outlook.
6. students who are interested in non-credit activities for personal growth.
7. students who can take advantage of college classes while they are still in high school.
8. students who can benefit from new and non-traditional kinds of learning experiences.
9. students who can avail themselves of media courses outside of the college classroom.
10. students like apprentices, journeymen, and employees-in-training taking classes which meet the requirements agreed upon by the Bureau of Apprenticeship and Training, United States Department of Labor, and participating companies.
11. students who intend to prepare themselves for jobs by earning associate degrees or certificates in specific occupational curricula.
12. students who intend to acquire knowledge and/or skills needed for jobs, but who do not intend to complete requirements for an associate degree or a certificate.  
(pp. 10-11)

The college also serves the community by:

1. sponsoring cultural events such as lecture series, stage plays, musical performances, art shows, and other activities similar in nature
2. offering consultant and training services
3. taking leadership in bringing about equality of opportunity and elimination of discrimination
4. cooperating with business and industry and other agencies and institutions in economic development



5. providing facilities for health clubs and other recreational activities
6. maintaining close ties with community-based organizations, business, and professional groups.
7. cooperating with other education institutions. (p. 11)

## Programs

Students pursuing the transfer programs are required to take courses in general education and liberal arts which consist of English, the humanities, natural science, and social science to provide a broad educational experience. Its pre-professional programs or **transfer programs** that will lead to a baccalaureate degree in a 4-year college or university include such specialized fields as:

Accounting	Human Ecology
Architecture	Industrial Technology
Biology	Industrial Education
Biotechnology	Journalism
Business Administration	Manufacturing Administration
Biopsychology	Mathematics
Communication	Medical Technology
Computer Science	Music
Computer Information system	Natural Resources
Criminal Justice	Pharmacy
Economics	Physical Therapy
Education	Physics
Fisheries and Wildlife	Political Science
Forestry	Pre-dental
Health Science	Pre-law
Health Services Management	Pre-medical
History	Pre-veterinary Science
Graphic Design	Psychology
Hospitality and Tourism Management	Surveying

Its **occupational course programs** consist of the following:

### **BUSINESS DIVISION**

Accounting  
Business Administration  
Executive Secretarial Studies  
Landscape Management  
Legal Secretarial Studies  
Management and Supervision  
Marketing  
Marketing Cert.  
Medical Secretarial Studies  
Secretarial Studies, Cert.  
Word and Information Processing  
Word and Information Processing, Cert.

### **COMPUTER APPLICATIONS DIVISION**

Applied Telecommunications  
Computer Applications Technology  
Computer Applications, Cert.  
Data Processing  
Data Processing, Cert.

### **HEALTH DIVISION**

Associate Degree Nursing  
Dental Assisting  
Diagnostic Medical Sonography  
Occupational Therapy Assisting  
Practical Nursing  
Radiologic Technology

### **HOSPITALITY EDUCATION DIVISION**

Culinary Arts  
Food and Beverage Management

### **PUBLIC SERVICE DIVISION**

Child Development  
Child Development-CDA Option  
Corrections  
Fashion Merchandising  
Interiors and Furnishings  
Law Enforcement  
Youth Services

### **TECHNOLOGY DIVISION**

Air Conditioning, Refrigeration and Heating Technology  
Air Conditioning, Refrigeration and Heating, Cert.  
Architectural Drafting Tech.  
Automated Manufacturing Tech.  
Automotive Servicing, Cert.  
Automotive Technology  
Chemical Technology  
Computer Electronics  
Electronics Servicing, Cert.  
Electronics Technology  
Industrial Technology and Tooling  
Machine Tool, Cert.  
Mechanical Drafting, Cert.  
Mechanical Drafting, Tech.  
Plastics Manufacturing Tech.  
Quality Science  
Quality Science, Cert.  
Water Purification Tech.  
Welding Technology  
Welding Cert.

Kellogg Community College**Structure**

Kellogg Community College has a board of trustees and a president. Reporting to the president are the vice presidents for (1) administration and finance, (2) instruction, (3) student services, and (4) community services. The vice president for instruction is responsible for the (1) arts and science divisions, (2) learning resource center, and (3) career and occupational education. The vice president for administration and finance is responsible for (1) buildings and grounds, (2) personnel, (3) bookstore, (4) business operations, (5) controller, (6) college facilities, and (7) compensation. The vice president for student services is in charge of (1) the student development/counseling office, (2) student records, (3) admission, (4) financial aid, (5) placement, and (6) job connection center. The vice president for community services is responsible for (1) continuing education, (2) community services, (3) prison programs, and (4) special projects.

**Objectives**

The mission of the college is to provide academic, occupational, general, and continuing education opportunities and offer life-long learning for all people in its district and contiguous area. It maintains close ties with organizations in the community, businesses, and professional groups; leads in the educational advancement of the area; promotes innovation; and provides support and assistance in economic development activities.

In view of the diverse experiences and needs of individuals seeking to expand their knowledge, the college maintains an open-door admission policy. It is also committed to providing a comprehensive range of curricula, courses, activities, and service (Kellogg Community College Catalog 1991-1992).

In fulfilling its goals and mission, the college is committed:

1. To admit all applicants to the services of the college and provide assessment, guidance and counseling, and services such as career planning, curriculum selection, academic advising, and transfer articulation to facilitate success in subsequent studies or employment.
2. To admit qualified students and provide a quality education in the pre-professional and liberal arts curricula which parallels that offered in the first two years at the majority of four-year colleges and universities to which students desire to transfer.
3. To admit qualified students and provide a quality education in technical and vocational curricula in a manner consistent with the principal needs and demands of the occupations involved.
4. To encourage, support, and cooperate with other educational bodies, civic groups, agencies, and businesses in endeavors likely to benefit the community in economic and/or educational advancement.
5. To provide general education experiences which facilitate the development of a person who is able to think clearly, communicate effectively, make appropriate decisions, and work efficiently with others.
6. To incorporate and provide the learning resources necessary for the promotion of excellence in the instructional programs.
7. To provide appropriate experiences for adults who wish to further occupational skills, pursue advanced academic studies, or make enriched use of leisure.

8. To afford secondary students the opportunity to enrich their learning by enrolling in college classes while still in high school.
9. To promote the institution and its services to constituents throughout the district and its contiguous service area.
10. To promote basic skills assessment and developmental programming in reading, writing, and mathematics which will bring both traditional and non-traditional students to a state of academic readiness for college-level work.
11. To provide financial assistance to students in direct aids, loans, scholarships, and part-time employment.
12. To assist graduates with assistance in preparing for and securing career placements.
13. To offer activities which provide students experience in working together, developing leadership and group skills, and/or personal fulfillment.
14. To assist in meeting the needs of the community by making available both the cultural programs and physical facilities of the college for educational purposes.
15. To acquire and maintain physical facilities (buildings, grounds, and equipment) necessary to accomplish the other functions.
16. To provide evaluation and support services for the improvement of teaching and learning.
17. To develop and conduct procedures for institutional accountability in all operations. (p. 3)

### **Programs**

Kellogg Community College offers the following transfer, occupational, and certificate programs:

**TRANSFER PROGRAMS**

Anthropology  
 Art  
 Art (Education)  
 Art (Commercial Art)  
 Art (Management)  
 Art (Studio)  
 Biology  
 Broadcast Communications  
 Business Administration  
 Chemistry  
 Corrections  
 Criminal Justice  
 Education (Elementary)  
 Education (secondary)  
 Engineering (Pre)  
 English  
 History  
 Law (Pre)  
 Liberal Arts/Sciences  
 Mathematics  
 Medicine (Pre)  
 Music  
 Pharmacy (Pre)  
 Philosophy  
 Physical Education  
 Physics  
 Political Science  
 Psychology  
 Public Relations  
 Scientific/Tech Writing  
 Social Work  
 Sociology  
 Speech/Theater Education  
 Speech Communication  
 Theater  
 Veterinary Medicine (Pre)  
 Water Technology

**OCCUPATIONAL PROGRAMS**

Accounting  
 Automotive Technology  
 Business Management  
 Communications Technologies  
 Computer Information Systems  
 Dental Hygiene  
 Drafting and Design Technology  
 Electronics Technology  
 Electronic Data Processing  
 Executive Secretary  
 Fire Science  
 Food Science and Processing  
 Technology  
 Hazardous Materials Technology  
 Human Service Technician  
 Industrial Electricity/Electronics  
 Industrial Engineering Technology  
 Industrial Engineering Technology  
 Industrial Machine Tool  
 Industrial Millwright  
 Industrial Plumber/Pipefitter  
 Industrial Sheet Metal  
 Industrial Welding  
 Law Enforcement  
 Legal Assistant  
 Legal Secretary  
 Manufacturing Technology  
 Mechanical Technology  
 Medical Laboratory Technician  
 Medical Secretary  
 Nursing (associate degree--R.N./Career  
 Mobility)  
 Physical Therapist Assistant  
 Radiographer  
 Word/Information Processing

## **CERTIFICATE PROGRAMS**

Accounting  
 AMA Management Certificate  
 Art for Enrichment  
 Automotive Technology  
 Child Care  
 Clerical Assistant  
 Computer Information Systems  
 Electronic Data Processing  
 EMT--Basic  
 EMT--Paramedic  
 English for Enrichment  
 Fire Science  
 Food Science and Processing  
 Technology  
 General Business  
 Gerontology  
 Hazardous Materials Technology  
 Industrial Electricity/Electronics  
 Industrial Machine Tool  
 Industrial Millwright  
 Industrial Plumber/Pipefitter  
 Industrial Sheet Metal  
 Industrial Welding  
 Business Management  
 Music Enrichment  
 Nursing--Practical (L.P.N.)  
 Secretarial  
 Word Processing

### Southwestern Michigan College

#### **Structure**

Southwestern Michigan College has a board of trustees and a president.

Reporting to the president are the vice presidents for (1) instruction, (2) business and

finance, (3) student services, and (4) community and technical services. Under the vice president for instruction are the deans of (1) the schools of business and technology, (2) the school of nursing, (3) business development and corporate services, (4) sports education, and (5) the director of museum. Under the vice president for business and finance are the directors of (1) accounting, (2) buildings and grounds, and (3) auxiliary services. Under the vice president for student services are the deans for placement and financial aid and associate dean of admissions and counselling. The vice president for community and technical services manages the (1) director of technical and information services, (2) coordinator of community service programs, and (3) coordinator of Niles extension center.

### **Objectives**

The objectives of the college are based on the needs of the students, the nature of the community, and the belief that higher educational opportunities should be available to high school graduates and other qualified students as a means of achieving their personal goals (Southwestern Michigan College Catalog 1990-1992).

Its objectives are:

1. To offer first and second year programs in the liberal arts and pre-professional fields for those students who wish to complete degree programs of the baccalaureate level or above at such institutions offering these degrees.
2. To provide advanced level programs in the liberal arts and pre-professional fields in cooperation with four-year colleges and/or universities.



3. To provide education and training toward developing and maintaining occupational competence in fields such as industry, business, science, agriculture, service technology and skilled trades and to provide opportunities to improve and prepare individuals for entrance into various occupations.
4. To offer a two-year program of general education for the social, cultural, and personal development of students desiring to continue their education beyond high school.
5. To offer credit and non-credit courses and combinations of courses for adults and other community college students when sufficient interest and demand exists to warrant their organization.
6. To provide individual services to students, including personal, academic, and vocational counseling to assist them in making decisions in career selection, in personality improvement, in the removal of deficiencies in preparation for a bachelor's degree program, in gaining maturity and self-confidence and in strengthening the foundation for self-direction.
7. To provide an institution that will give leadership to community cultural activities and other community service activities.
8. To provide post-high school education at a cost that area residents can afford.
9. To provide an institution that will produce the kind of training and educated people that will attract industry not only to the College district but also to Michigan. (pp. 17-18)

### **Programs**

The college offers the Associate in Arts degree and Associate in Science degree for those pursuing the transfer programs. Course requirements for the transfer programs include the general education courses as: communication and humanities, social sciences, natural science and mathematics, and physical education.

Its **transfer programs** are as follows:

Agriculture  
 Architecture  
 Art  
 Business Administration  
 Chiropractic  
 Computer Science  
 Conservation/Forestry  
 Dentistry  
 Engineering  
 Journalism  
 Law  
 Medicine  
 Medical Technology  
 Mortuary Science  
 Music  
 Optometry  
 Pharmacy  
 Physical Therapy  
 Public Administration  
 Social Work  
 Teacher Education  
 Theater  
 Veterinary Medicine

Its **occupational program** offers the Associate in Applied Science degree  
 by its School of Technology and School of Nursing. The programs offered by the  
 School of Technology consist of:

Automotive Mechanics Technology  
 Aviation Mechanics Technology  
 Drafting Technology  
 Electronics Technology  
 Engineering Technology--Design Option  
 Engineering Technology--Production Option  
 Machine Tool Technology  
 Welding Technology

## Lake Michigan College

### **Structure**

Lake Michigan College has a board of trustees and a president. The president oversees (1) the academic and student services, (2) human resources and special projects, (3) administrative services, (4) corporate and community development, and (5) institutional advancement and planning.

The vice president for instructional services is responsible for the (1) learning resources center, (2) liberal arts and general studies, and (3) occupational studies and off-campus learning center. The vice president of student services and human resources oversees the functions of human resources, staff development, and student services. The vice president of institutional advancement and planning is responsible for (1) college development, (2) conference services, (3) foundations and grants, (4) institutional and community research, (5) intercollegiate athletics, and (6) marketing services. The vice president of corporate and community development oversees the (1) apprenticeship training, (2) community services, (3) continuing education, (4) customized training for business and industry, (5) dislocated workers program, and (6) small business development center.

### **Objectives**

The mission of the college is based on the belief that education is for all who wish to develop their potential. The college believes that it should assist in meeting the

educational, vocational, and cultural wellness and recreational needs of the community it serves. This involves the following obligations (Lake Michigan College Catalog 1991-1993):

1. To provide for the educational aspirations, needs and expectations of the individual student and the community;
2. To provide for the vocational needs and desires of the individual and the community;
3. To provide for the cultural interests and the wellness and recreational needs of the individual, and thus contribute to the development of effective citizens;
4. To provide an assurance of quality for programs and in people; and
5. To provide an environment of global awareness, intercultural sensitivity, and international communication for individual students and the community.(p. 7)

The **goals** of the college are:

1. To encourage the individual to make a self-analysis in order to bring about a better identification and understanding of his/her goals in light of his/her abilities and interests.
2. To encourage the development of genuine, constructively-motivated independence that will stimulate interest in more closely examining existing values and beliefs, both personal and societal.
3. To recognize the regional and local economic needs of the community: agriculture, business, industrial, and service, and to provide educational and training programs to prepare personnel to meet these needs.
4. To promote citizenship so that the individual might better assume a productive role in the community and develop attributes such as integrity, dependability, and resourcefulness.(p. 7)

**Programs**

Lake Michigan College offers the following programs:

**TRANSFER PROGRAMS**

Art  
Biology  
Business Administration  
Business Education  
Chemistry  
Chiropractic (Pre)  
Computer Science  
Dentistry (Pre)  
Drama  
Education  
Engineering  
English  
Foreign Language  
Geography  
Geology  
History  
Law (Pre)  
Liberal Arts  
Literature  
Mathematics  
Medicine (Pre)  
Mortuary Science (Pre)  
Music  
Optometry (Pre)  
Osteopathy (Pre)  
Pharmacy (Pre)  
Philosophy  
Physical Education  
Physical Science  
Physics  
Political Science  
Psychology  
Social Work  
Sociology  
Speech Theater  
Veterinary Medicine

**OCCUPATIONAL PROGRAMS**

Accounting  
Bank Administration  
Clerical Assistant  
Computer Information Systems  
Correction, Probation & Parole  
Dental Assisting  
Drafting and Design Technology  
Electro-mechanical Technology  
Electronics Technology  
Executive Secretary  
General Business Assistant  
Hospitality & Tourism Management  
Law Enforcement  
Legal Secretary  
Machine Tool Technology  
Management Trainee  
Manufacturing Technology  
Marketing & Retailing  
Medical Secretary  
Nursing  
Radiologic Technology  
Stenographer  
Word Processing

**CERTIFICATE PROGRAMS**

Clerical  
Computer Data Entry/Operations  
Dental Assisting  
Drafting & Design  
Hazardous Materials  
Hospitality  
Machine Tool Technology  
Nursing, Practical  
Secretary  
Word Processing

Interviews with Administrators of  
Community Colleges in Michigan

In the interviews with the administrators of community colleges in Michigan, the researcher noted a correlation in their objectives, organizational structures, programs, services and admission policy.

As noted earlier, the objectives of these community colleges are to make education available to all people, and to provide comprehensive occupational and transfer programs to meet the needs of the communities. The president of Lake Michigan College (LMC) also called LMC as the people college. The vice president for academic and student affairs of Lansing Community College (LCC) stated that LCC is non elitist. LCC is egalitarian providing educational opportunities to all people aged 18 or older. It offers the first two years of a 4-year college program. It provides transfer and occupational programs, and community services.

As indicated in appendix J, they have similar patterns of organizational structures. In the case of Lake Michigan College (LMC) the president pointed out that its organizational structure follows the "matriarchal task oriented approach" where there is a lot of cross planning made between the major divisions. It is clear that the organizational structure of LMC is patterned after the participative model. The large community colleges, defined by the vice president for academic and student affairs of LCC as having 10,000 students or more, such as LCC and Grand Rapids Community

College have an executive vice president who reports to the president.

They all have open admission. The age range of the students in LMC is from 9 (summer programs) to 80 years. At Southwestern Michigan College, the age range is from 18 to 70 years. At Kellogg Community College, most of the students are female aged 30 to 35.

Once enrolled, students are given various tests to assess their interests and basic competence in reading and mathematics. This will help to plan their programs appropriately. Counseling and guidance services are also provided for the students to meet their personal, social, and academic needs.

Based on the researcher's interviews and the information from the catalogs, it is noted that the pattern in the structure, objectives, and programs of these community colleges is similar. They have a board of trustees and a president. The larger community colleges such as Lansing and Grand Rapids have an executive vice president. Lansing Community College has three vice presidents for business and finance, academic and student affairs, and research, planning and development who report to the president. Grand Rapids Community College has six officers reporting to the president. They are the chief financial officer, executive director for strategic planning, chief development officer, executive vice president, executive director quality management/new student development, and dean of institutional research. The executive vice president manages the vice president of instruction, dean of student



services, vice president for community outreach, and executive director of personnel/affirmative action officer.

Kellogg Community College has four vice presidents who manage the offices of administration and finance, instruction, student services, and community services. Southwestern Michigan College has four vice presidents who manage the offices for business and finance, community and technical service, instruction and student services. Lake Michigan College has five vice presidents heading the divisions for academic and student services, human resources and special projects, administrative services, corporate and community development, and institutional advancement and planning. As can be noted in appendix J, the organizational structure of Lake Michigan College is based on the participational model of organization.

These community colleges share similar commitments and objectives of providing academic, occupational, general, and life long learning for all people in their district and surrounding areas. They maintain close ties with business and professional organizations in the community. They have an open-door admission policy and provide a wide range of course programs to their diverse student population. Their programs range from certificate programs of a few days' duration to a 2-year associate degree program, covering transfer and occupational or terminal programs.

### The Need for the Community College System in Malaysia

In assessing the need for the community college system in Malaysia, the data obtained from the survey questionnaires were analyzed using Statistical Analysis System (SAS, 1990).

The survey sample consisted of selected Malaysian educators, politicians, and businessmen. One hundred questionnaires were sent to the educators; 44 were returned. Sixty questionnaires were sent to both the politicians and the businessmen. However, 30 politicians and 25 businessmen returned their questionnaires. There is, therefore, a total of 99 respondents, representing a return rate of 45%. They were predominantly male (81%). A majority of them (78.6%) were university graduates, and more than half of them (67%) were 40 years old and above.

### Importance of Education and Human Resource Development and Need for Community Colleges

Table 15 of appendix L indicates the respondents' perceptions of the importance of education and human resource development in Malaysia. Approximately 90% of the respondents agreed or strongly agreed that: (1) Malaysia regards education as a key to development, (2) Malaysia aims to eradicate poverty through education, (3) Malaysia believes that human resource development and economic development are closely related, (4) every individual should be given the opportunity to reach his/her full

potential, (5) more colleges are needed in Malaysia to cater for the increasing number of secondary school graduates, (6) Malaysia's growing industrialization demands more college educated workers, and (7) Malaysia needs community colleges to help enhance its efforts of meeting the demand for skilled manpower.

Table 5 indicates the result of the chi-square test of significance for items 1 to 7. As stated earlier, the level of significance was set at 0.01. The probabilities associated with the  $\chi^2$  values are larger than 0.01 suggesting that there is no significant difference in the perceptions of the educators, politicians, and businessmen on the importance of education and human resource development and need for community colleges in Malaysia.

As shown in table 15 of appendix L, it is evident that over 90% of each group of respondents (educators, politicians, and businessmen) agreed or strongly agreed that education and human resource development is important in the economic development of Malaysia.

#### Usefulness of Community Colleges For Malaysia

Table 17 of appendix L indicates the respondents' perceptions of the usefulness of community colleges for Malaysia. Approximately 90% of the respondents agreed or strongly agreed that community colleges for Malaysia are useful because they:

TABLE 5

THE CHI-SQUARE ( $\chi^2$ ) TABLE OF ITEMS 1 TO 7 ON THE PERCEPTIONS OF SELECTED MALAYSIAN EDUCATORS, POLITICIANS, AND BUSINESSMEN ON THE IMPORTANCE OF EDUCATION AND HUMAN RESOURCE DEVELOPMENT IN MALAYSIA

ITEM		DF	$\chi^2$	Prob
1.	Malaysia regards education as a key to development.	4	2.030	0.730
2.	Malaysia aims to eradicate poverty through education.	4	2.355	0.671
3.	Malaysia believes that human resource development and economic development are closely related.	4	0.921	0.921
4.	Every individual should be given the opportunity to reach his/her full potential.	4	3.799	0.434
5.	More colleges are needed in Malaysia to cater to the increasing number of secondary school graduates.	4	2.065	0.724
6.	Malaysia's growing industrialization demands more college educated workers.	4	5.645	0.227
7.	Malaysia needs community colleges to help enhance its efforts of meeting the growing demand for skilled manpower.	4	7.708	0.103

Note: This is based on Table 16 of Appendix L.

- (1) offer educational opportunities to disadvantaged secondary school graduates,
- (2) provide occupational skills in semi-professional fields, (3) serve as stepping stones for motivated students to continue their education in universities, (4) meet the needs for skilled manpower in business, industry and other professions, (5) cater to the educational needs of secondary school graduates, (6) meet the educational needs of working adults to attain specific qualifications for career advancement and change,
- (7) contribute to the intellectual and cultural activities of their communities, and
- (8) prepare students to assume responsible roles as citizens.

Table 6 indicates the result of the chi-square test of significance for items 8.1 to 8.8 of Table 18 of appendix L. The level of significance was set at 0.01. The probabilities associated with the  $\chi^2$  values are larger than 0.01. This suggests that there is no significant difference in the perceptions of the educators, politicians, and businessmen on the usefulness of community colleges for Malaysia. This implies that there is agreement among the selected Malaysian educators, politicians, and businessmen that community colleges are useful for Malaysia (See table 17 of appendix L). Approximately 90% of each of the three groups of respondents agreed or strongly agreed with the usefulness of community colleges for Malaysia.

TABLE 6

THE CHI-SQUARE ( $\chi^2$ ) TABLE OF ITEMS 8.1 TO 8.8 ON THE PERCEPTIONS OF SELECTED MALAYSIAN EDUCATORS, POLITICIANS, AND BUSINESSMEN ON THE USEFULNESS OF COMMUNITY COLLEGES FOR MALAYSIA

ITEM		DF	$\chi^2$	Prob
8.	Community colleges for Malaysia are useful because they:	4	1.998	0.736
	1. Offer educational opportunities to disadvantaged secondary school graduates.	4	4.976	0.290
	2. Provide occupational skills in semi-professional fields.	4	0.884	0.927
	3. Serve as stepping stones for motivated students to continue their education in universities.	4	1.459	0.818
	4. Meet the needs for skilled manpower in business, industry and other professions.	4	2.465	0.651
	5. Cater to the educational needs of secondary school graduates.	4	2.434	0.657
	6. Meet the educational needs of working adults to attain specific qualifications for career advancement and change.	4	7.401	0.116
	7. Contribute to the intellectual and cultural activities of their communities.	4	4.128	0.389
	8. Prepare students to assume responsible roles as citizens.	4		

Note: This is based on Table 18 of Appendix L.

### Transfer Programs

Tables 19, 21 and 23 of appendix L indicate the respondents' perceptions on the need for the course programs for the community colleges in Malaysia that can be used as transfer programs to a 4-year college or university.

They (50% and more) expressed a high need for the transfer programs in the professional fields as shown in table 7. More than 50% indicated an average need for the following transfer programs in the professional fields as shown in table 8.

The transfer programs which they rated as having very low need were: (1) history (44.44%), (2) interior design--liberal arts (42.42%), (3) literature (41.41%), (4) art (39.80%), and (5) physical education (30.30%).

TABLE 7  
HIGH NEED TRANSFER PROGRAMS

Programs	%
Computer Information System	74.75
Computer Science	70.71
Computer System Engineering	69.70
Medical Technology	69.70
Agriculture	61.62
Management	58.59
Nursing	57.58
Finance	56.57

Table 7--Continued	
Communications	54.55
Manufacturing Administration	54.55
Marketing	51.52
Pre-Science-Pre-Medicine	50.51

TABLE 8

## AVERAGE NEED TRANSFER PROGRAMS

Programs	%
Engineering Graphics	63.64
Public Relations	62.63
Printing Management/Marketing	62.63
Sociology	60.61
Librarianship	60.61
Public Administration	59.60
Economics	59.60
Real Estate	58.59
Pre-Science	58.59
Pre-Law	58.59
Pre-Science-Pre-Veterinary	57.58
Physical Education	57.58
Industrial Design	57.58
Surveying	56.57
Social Work	56.57
Pre-Engineering-Electrical	56.57
Pre-Engineering	55.57



Table 8--Continued	
Physical Therapy	55.56
Dietetics	55.56
Biology	55.56
Chemistry	55.10
Interior Design--Liberal Arts	54.55
Advertising	54.55
Journalism	52.54
Pre-Engineering-Mechanical	54.53
Accounting	51.53
Mathematics	51.52
Literature	50.52
Art	50.02
Recreation	50.51
Pre-Engineering-Industrial	50.51
Architecture	50.51

Tables 9, 10, and 11 indicate the result of the chi-square test of significance for items 1 to 64 of tables 20, 22 and 24 of appendix L. The level of significance was set at 0.01. To achieve appropriate expected frequency so that chi-square analysis becomes applicable, responses for "Low" and "Average" need were combined for items: 1, 3, 4, 6, 8, 10, 11, 12, 13, 16, 20, 23, 24, 29, 30, 31, 33, 34, 36, 42, 43, 44, 45, 49, 52, 56, 59, 63 and 64. Responses for "Average" and "High" need were combined for items: 5, 22, 25, and 28. For these items, the degrees of freedom is 2. Except for items 3 and 11, the

probabilities associated with the  $\chi^2$  values for the rest of the items are larger than 0.01, suggesting that there is no significant difference in the perceptions of the educators, politicians, and businessmen on the need for the transfer programs. This implies that, except for items 3 and 11, there is an equal proportion of educators, politicians and businessmen who perceived the same way for all the other 62 items of transfer programs for community colleges in Malaysia.

Items 3 and 11 indicate that there is a significant difference in the perceptions of the educators, politicians and businessmen on the need for agriculture and computer information systems. A small proportion of businessmen (36%) indicated a high need for agriculture. On the other hand, a large proportion of politicians (80%) and educators (63.64%) indicated a high need for agriculture. For item 11, computer information systems, a large proportion of businessmen (92%) expressed a high need for this program. However, the politicians were divided on this. Only 56.67% of them indicated a high need for computer information systems. More than half of the educators (77.27%) agreed with the businessmen that there was a high need for computer information science. This indicates a difference in perceptions and values for these programs by the three groups of respondents. This may well be due to the fact that the politicians are mainly from the rural areas where agriculture is the primary economic activity. The businessmen and educators, on the other hand, are concentrated in the urban centers where computers are widely used and computer literacy has become a trend.

TABLE 9

THE CHI-SQUARE ( $\chi^2$ ) TABLE OF ITEMS 1 TO 21 ON THE PERCEPTIONS OF  
SELECTED MALAYSIAN EDUCATORS, POLITICIANS, AND BUSINESSMEN ON  
THE NEED FOR THE TRANSFER PROGRAMS IN THE PROFESSIONAL  
FIELDS FOR COMMUNITY COLLEGES IN MALAYSIA

Item		DF	( $\chi^2$ )	Prob* < .01
1.	Accounting	2	0.893	0.640
2.	Advertising	4	7.665	1.105
3.	Agriculture	2	11.299	0.004*
4.	Architecture	2	0.317	0.854
5.	Art	2	2.197	0.333
6.	Aviation	2	0.356	0.837
7.	Biology	4	5.064	0.281
8.	Business Administration	2	6.482	0.039
9.	Chemistry	4	4.533	0.339
10.	Communications	2	0.550	0.760
11.	Computer Information Systems	2	9.287	0.010*
12.	Computer Science	2	6.466	0.039
13.	Computer Systems Engineering	2	7.781	0.020
14.	Criminal Justice	4	1.089	0.896
15.	Dietetics	4	9.510	0.050
16.	Economics	2	0.099	0.952
17.	Engineering Graphics	4	6.959	0.138
18.	English	4	10.460	0.033
19.	Fashion Merchandising	4	9.291	0.054
20.	Finance	2	0.752	0.687
21.	Forestry	4	10.318	0.035

Note: This is based on Table 20 of appendix L.

TABLE 10

THE CHI-SQUARE ( $\chi^2$ ) TABLE OF ITEMS 22 TO 42 ON THE PERCEPTIONS OF SELECTED MALAYSIAN EDUCATORS, POLITICIANS, AND BUSINESSMEN ON THE NEED FOR THE TRANSFER PROGRAMS IN THE PROFESSIONAL FIELDS FOR COMMUNITY COLLEGES IN MALAYSIA

	Item	DF	( $\chi^2$ )	Prob
22.	History	2	0.386	0.824
23.	Industrial Design	2	0.739	0.691
24.	Industrial Education	2	2.546	0.280
25.	Interior Design--Liberal Arts	2	1.547	0.461
26.	Journalism	4	2.298	0.681
27.	Librarianship	4	2.012	0.734
28.	Literature	2	1.967	0.374
29.	Management	2	1.353	0.508
30.	Manufacturing Administration	2	2.442	0.295
31.	Marketing	2	2.448	0.294
32.	Mathematics	4	3.552	0.470
33.	Medical Technology	2	0.126	0.939
34.	Nursing	2	5.797	0.055
35.	Paper Science/Engineering	4	1.804	0.772
36.	Pharmacy	2	4.648	0.098
37.	Physical Education	4	0.372	0.985
38.	Physical Therapy	4	1.495	0.828
39.	Physician's Assistant	4	6.408	0.171
40.	Physics	4	2.317	0.678
41.	Political Science	4	4.503	0.342
42.	Pre-Engineering	2	4.690	0.096

Note: This is based on Table 22 of Appendix L.

TABLE 11

THE CHI-SQUARE ( $\chi^2$ ) TABLE OF ITEMS 43 TO 64 ON THE PERCEPTIONS OF  
SELECTED MALAYSIAN EDUCATORS, POLITICIANS, AND BUSINESSMEN ON  
THE NEED FOR THE TRANSFER PROGRAMS IN THE PROFESSIONAL FIELDS  
FOR COMMUNITY COLLEGES IN MALAYSIA

	Item	DF	( $\chi^2$ )	Prob
43.	Pre-Engineering-Electrical	2	6.195	0.045
44.	Pre-Engineering-Industrial	2	4.881	0.087
45.	Pre-Engineering-Mechanical	2	4.843	0.089
46.	Pre-Law	4	1.696	0.791
47.	Pre-Science	4	4.291	0.368
48.	Pre-Science-Pre-Dentistry	4	6.491	0.165
49.	Pre-Science-Pre-Medicine	2	1.382	0.501
50.	Pre-Science-Pre-Optometry	4	5.363	0.252
51.	Pre-Science-Pre-Veterinary	4	5.385	0.250
52.	Primary Education	2	0.642	0.726
53.	Printing Management/Marketing	4	7.419	0.115
54.	Psychology	4	4.979	0.289
55.	Public Administration	4	1.224	0.874
56.	Public Relations	2	1.616	0.446
57.	Real Estate	4	5.290	0.259
58.	Recreation	4	6.492	0.165
59.	Secondary Education	2	3.487	0.175
60.	Social Work	4	4.316	0.365
61.	Sociology	4	4.955	0.292
62.	Surveying	4	7.141	0.129
63.	Travel/Tourism	2	3.411	0.182
64.	Wild-life Management	2	6.621	0.037

Note: This is based on Table 24 of Appendix L.

### Occupational Programs

Table 25 of appendix L indicates the respondents' perceptions on the need for the occupational or certificate and diploma programs that are 2 years or less in duration.

They (50% and more) expressed a high need for the occupational programs such as (1) data processing (computer), (2) banking and finance, (3) electronics technology, (4) business, marketing, and (5) water and waste water technology shown in table 12. More than 50% of them indicated an average need for the occupational programs shown in table 13. The occupational programs which they rated as having very low need were: (1) professional photography (40.40%), (2) fashion merchandising (37.37%), and (3) cosmetology (36.36%).

Table 14 indicates the result of the chi-square test of significance for items 1 to 23. The level of significance was set at 0.01. Again, in order that chi-square analysis was appropriately applied, response for "Low" and "Average" need were combined for the items: 1, 2, 6, 7, 11, 12, 13, 14, 18 and 22. "Average" and "High" need responses were combined for the items: 8 and 19. Except for item 14, the probabilities associated with the  $\chi^2$  values for the rest of the items are larger than 0.01. This suggests that there is no significant difference in the perceptions of the educators, politicians, and businessmen on the need for the other 22 occupational programs. This implies that there is an equal proportion of educators, politicians, and businessmen who perceived

the same way for all the other 22 items of occupational programs.

Item 14, electronics technology, indicates that there is a difference in the perception of the three groups of respondents for this program. A large proportion of businessmen (72%) and educators (65.91%) expressed a high need for this program. However, only a small proportion of politicians (33.33%) indicated a high need for it.

As can be noted, there is a strong agreement between the educators, politicians, and businessmen pertaining to the issues that (1) education and human resource development are important tools of development for Malaysia, and (2) community colleges are useful for Malaysia. They also shared the same perceptions for the need of 62 transfer programs and 22 occupational programs. They indicated a high need for the following programs for community colleges in Malaysia:

(1) Computer Information System [74.75%], (2) Computer Science [70.71%], (3) Computer System Engineering [69.70%], (4) Medical Technology [69.70%], (5) Agriculture [61.62%], (6) Management [58.59%], (7) Nursing [57.58%], (8) Finance [56.57%], (9) Communications [54.55%], (10) Manufacturing Administration [54.55%], (11) Marketing [51.52%], (12) Pre-Science-Pre-Medicine [51.51%], (13) Data Processing (computer) [64.65%], (14) Banking and Finance [57.58%], (15) Electronics Technology [57.58%], (16) Business--Marketing [55.56%], and (17) Water and Waste Water Technology [55.56%].

TABLE 12

## HIGH NEED OCCUPATIONAL PROGRAMS

Programs	%
Data Processing (computer)	64.65
Banking and Finance	57.58
Electronics Technology	57.58
Business, Marketing	55.56
Water and Waste Water Technology	55.56

TABLE 13

## AVERAGE NEED OCCUPATIONAL PROGRAMS

Programs	%
Home Economics	65.66
Television Servicing	62.63
Real Estate	62.63
Fire Technology	57.14
Drafting Technician	56.57
Welding Technician	54.55
Machine Tool Technician	54.55
Criminal Justice, Corrections	52.53
Cosmetology	52.53
Criminal Justice, Law Enforcement	51.52
Automotive Mechanic (theory)	50.51
Automotive Body and Fender	50.51



TABLE 14

THE CHI-SQUARE ( $\chi^2$ ) TABLE OF ITEMS 1 TO 23 ON THE PERCEPTIONS  
OF SELECTED MALAYSIAN EDUCATORS, POLITICIANS, AND  
BUSINESSMEN ON THE NEED FOR THE OCCUPATIONAL  
PROGRAMS FOR COMMUNITY COLLEGES IN MALAYSIA

	Item	DF	( $\chi^2$ )	Prob* < .01
1.	Accounting	2	8.265	0.016
2.	Agriculture Business	2	7.190	0.027
3.	Automotive Body and Fender	4	4.592	0.332
4.	Automotive Mechanics (theory)	4	5.169	0.270
5.	Automotive Technician	4	6.717	0.152
6.	Banking and Finance	2	0.077	0.962
7.	Business, Marketing	2	0.603	0.740
8.	Cosmetology	2	5.373	0.068
9.	Criminal Justice, Corrections	4	3.835	0.429
10.	Criminal Justice, Law Enforcement	4	5.697	0.223
11.	Data Processing (computer)	2	3.121	0.210
12.	Drafting Technician	2	0.656	0.720
13.	Early Childhood Education	2	3.346	0.188
14.	Electronics Technology	2	10.598	0.005*
15.	Fashion Merchandising	4	6.722	0.151
16.	Fire Technology	4	10.609	0.031
17.	Home Economics	4	4.181	0.382
18.	Machine Tool Technician	2	3.682	0.159
19.	Professional Photography	2	3.012	0.222
20.	Real Estate	4	3.224	0.521
21.	Television Servicing	4	7.230	0.124
22.	Water and Waste Water Technology	2	0.846	0.655
23.	Welding Technician	4	11.418	0.022

Note: This is based on Table 26 of Appendix L.

These programs can be classified under four main areas of work:

(1) Computer-related, (2) Medical-related, (3) Business-related, and (4) Technical-related. These findings concur with the areas of educational needs for skilled and professional manpower of the various sectors of the economy in Malaysia as propounded by the government through the Sixth Malaysia Plan 1991-1995 and National Development Policy 1991-2000. These also reflect the views of the administrator of Higher Education of Malaysia during the researcher's interview with him.

The findings indicate that the selected Malaysian educators, politicians, and businessmen believe that community colleges are useful and needed for Malaysia. In view of this strong support, the establishment of community colleges in Malaysia is highly needed.

#### Interview with Administrator of Higher Education of Malaysia

In an interview with the administrator of higher education in Malaysia, the researcher noted the various processes of planning and implementing the country's institutions of higher learning. The administrator reiterated the need for computer-related, technical-related, medical-related and business-related educational programs to meet the growing demands for skilled and professional manpower in Malaysia. He

pointed out that the Government's policy on the country's educational programs are elaborated in the Sixth Malaysia Plan 1991-1995 and National Development Policy 1991-2000. He noted that there is a large number of Malaysian students studying overseas. He stated that establishing additional institutions of higher education is dependent upon the need of the country.

### Summary

This chapter presented three main areas of discussion. First, it provided brief background information on Malaysia. Second, it described the organizational and administrative structure of the community colleges that the researcher visited in Michigan. The mission, objectives, and programs of these colleges were also covered. Interviews with administrators of community colleges were summarized. Third, it presented the analysis of the data obtained from the questionnaires that were sent to selected Malaysian educators, politicians, and businessmen. This was done to fulfill one purpose of the study: to ascertain the need for the community college system in Malaysia and to assess the kinds of course programs that are needed to be offered by such institutions as perceived by the respondents. A summary of the interview with the administrator of higher learning in Malaysia was also provided.

Malaysia is about the same size as Vietnam or the Philippines. It is, however, blessed with a small population and rich natural resources. Its people are

multiethnic which contribute to its unique cultural heritage. As a former colony of Great Britain, Malaysia's system of government and education is patterned after the British system. The rapid economic development in Malaysia has necessitated the expansion of its educational institutions to meet the increasing demands for skilled manpower.

In connection with this study, the researcher visited five community colleges in Michigan and interviewed the administrators. They were (1) Lansing Community College, (2) Grand Rapids Community College, (3) Kellogg Community College, (4) Lake Michigan College, and (5) Southwestern Community College.

A description was made of their organizational and administrative structure. A common pattern of governance was noted. They have a board of trustee and a president. Under the president are the vice presidents who head various offices responsible for business and finance, instruction or academic affairs, student services, and community services. Reporting to each vice president are the directors and deans who manage their respective departments.

In their mission statement and objectives, they stated their philosophy, functions, and purposes. They share the same commitment or mission of providing transfer programs, occupational programs, and other training programs to their students. They work closely with business, industry, labor, government, community agencies, and educational institutions. They have an open-door policy on admissions

and are committed to meeting the needs of their diverse student populations.

In an attempt to assess the need for the community college system in Malaysia, the data obtained from the questionnaires that were sent to selected Malaysian educators, politicians, and businessmen were analyzed. They seemed to share the same perception pertaining to the importance of education and human resource development for economic development. They agreed that every individual should be given the opportunity to reach his/her full potential. They perceived that more colleges are needed in Malaysia to meet the needs of the increasing number of secondary school graduates. They agreed that Malaysia's growing industrialization demands more college educated workers, and that community colleges are useful and needed for Malaysia to help enhance the country's effort of meeting the growing demand for skilled manpower. They also concurred on the need for the transfer and occupational programs for community colleges in Malaysia.

Chapter 5 presents the proposed model for the organization, administration, and programs for community colleges in Malaysia.

## CHAPTER V

### RECOMMENDED MODEL

#### Proposed Philosophy for Community Colleges in Malaysia

Based on the review of related literature, interviews with the administrators of selected community colleges in the United States, and the research findings of this study, the following recommended model is presented for discussion, consideration, and possible adoption.

#### To Provide Comprehensive Programs

The community colleges in Malaysia will be comprehensive, providing various programs to meet the needs of Malaysian students. The colleges will have an open-door admission policy. They will be accessible to students of all races, religions, color, creed, classes, and abilities. They will serve secondary school graduates and adults who are 18 years and older. They will meet the various educational and training needs of the country's diverse student population. They will provide equal opportunity through education to all citizens. It will be their goal and function to

meet the needs of the country's growing demand for skilled manpower. The community colleges will facilitate the government's commitment to become a fully developed nation by the year 2020. These institutions will provide various programs, courses, and life-long learning opportunities that are needed by the community in particular and the nation in general. They will be a place where individual hopes and dreams of improving themselves with knowledge, wisdom, and skills may be realized. Working adults, unskilled workers, secondary school graduates, disadvantaged youths, housewives, school dropouts, and the unemployed can achieve their aspirations of reaching the highest level of social and personal status as their talents may permit, through these institutions.

#### To Strive for Excellence in Student Learning

The community colleges in Malaysia will strive for excellence in student learning. Dedicated and competent faculty members, who share the values and vision of community colleges, can provide excellent instruction. A variety of instructional strategies and the application of the latest research in teaching and learning will be employed to maximize instruction and learning. This will be supported by strong learning resources such as adequate libraries, instructional media, learning laboratories, and other necessary equipment.

### To Be Involved in Community Services

The community colleges in Malaysia will be involved in community services. They will contribute to the economic and civic vitality, not only of their communities but also the nation. They will also serve as catalysts in creating a climate of learning that will permeate the classroom, campus, neighborhood, and the nation as a whole. They will work with the surrounding schools, businesses, industry, labor, and government by meeting the educational and training needs of these organizations. They will recognize that life-long learning is not just the enrichment of the individual, but also the advancement of the nation. In building communities, they build the nation and help to achieve national unity. In a multiethnic society, this role is indispensable. These community colleges can be a paramount source of educational, civic, cultural, and economic renewal for the nation and will promote a spirit of national unity.

### To Be Involved in All Aspects of Student Development

The community colleges in Malaysia will be concerned with the total development of the student. They will provide knowledge that is useful for the personal, social, and civic development of the student. They will assist the students to become well-informed, cultured persons who are well functioning members of society



and responsible citizens with strong moral and ethical values. They will provide guidance and counseling services to the students so that they will succeed in their studies and learn to live with others. They will also provide placement services that will facilitate the employment of the students upon graduation.

### Purposes of Community Colleges in Malaysia

There should be five major purposes for the community colleges in Malaysia: (1) to provide transfer programs, (2) to provide occupational programs, (3) to provide general education, (4) to provide guidance and counseling service, and (5) to provide community services.

#### To Provide Transfer Programs

These community colleges will be accessible to all qualified persons. Students, who are academically inclined, and working adults who wish to pursue their baccalaureate degree can fulfill the first 2 years of university academic requirements through the transfer program at the community colleges. After completing this program, they can transfer to any 4-year college or university to continue their higher education.

#### To Provide Occupational Programs

These community colleges will be providing occupational programs. The

duration of these programs range from a few weeks to two years. They are also called terminal programs because students leave after graduation to seek employment. These programs will provide skill training in various occupational fields that are needed by business and industry. Some of them are also transfer programs so that students can pursue their higher education in their chosen professional fields at 4-year colleges or universities after graduation from the community colleges.

#### To Provide General Education

These community colleges will be offering general education or liberal arts. This program consists of communication, the humanities, science, mathematics, and social studies. The communications/humanities and fine arts program consists of philosophy, languages, journalism, music, and art. Science and mathematics include biology, chemistry, physics, mathematics, computer science, geology, biology, and physiology. The social sciences include education, geography, political science, psychology, sociology, and history. The aim of general education is to make the student a well-informed, well-cultured, well-adjusted member of society and a responsible citizen. They will instill in the students strong moral and ethical values. This program is also intended for developmental students who need to prepare for college level education.

### To Provide Guidance and Counseling Services

These community colleges will be providing guidance and counseling services. These services concern the individual welfare of the student. They cover guidance, housing, health services, placement, and counseling. They assist the students in becoming adjusted in their college environment and to succeed in their studies. They also provide orientation of the students in registration, selection of courses, acquaintance with rules, procedures and policies, and with college personnel and other students. Collection and analysis of personal data and psychological testings are provided. Counseling service with placement of students in the employment market upon graduation is also rendered.

### To Provide Community Services

These community colleges will be providing community services. These include adult education, community use of facilities for cultural programs, campus conferences, public affairs lectures, speaker's bureaus, short courses, community recreation, campus tours, and special events. The community colleges are therefore centers of community life. They provide the communities, including businesses and industries, the leadership and coordination capabilities in making long-range plans and solving problems. They contribute to and promote the cultural, intellectual, and social life of the college district communities.

The adult or continuing education program will meet the educational needs of the adults who wish either to complete their formal education or take short-term courses which they are interested in. It is a program which will meet their leisure-time needs. For those who have a secondary school or college education, they may take classes in history, economics, finance, or international affairs to advance their knowledge. Those who terminated their formal schooling early and wish to continue their education may benefit from this program by fulfilling the requirements for completing their formal education. It provides life-long learning for all adults who need to acquire specific skills and knowledge.

Based on these philosophies, the following eight recommendations are made to develop a model for the organization, administration, and programs for community colleges in Malaysia.

Recommendation 1: That the Malaysian Government Establish a Department Under the Ministry of Education to Organize, Administer, and Implement Programs for Community Colleges

In view of the fact that the respondents have overwhelmingly supported the need and usefulness of community colleges in Malaysia to meet the country's growing demands for skilled manpower, to cater to the increasing number of secondary school graduates, and in its effort to reach the national goal of becoming an industrialized

nation by 2020, it is recommended that the Malaysian government establish a department under the Ministry of Education to organize, administer, and implement programs for community colleges.

Recommendation 2: That Residential Facilities and Programs Be Considered in the Development of Community Colleges in Malaysia

Malaysia is blessed with a small population and rich natural resources. Its economy is vibrant. While the history of its formal educational development is rather short, stretching back to the mid-1800s, it has grown rapidly. Its rapid economic and social development has influenced the educational development of the country.

As a multiethnic society, Malaysia has consistently emphasized the need and importance of political stability and national unity. It recognizes that education plays a vital role in this effort. The primary thrust of its New Economic Policy is the eradication of poverty and restructuring of society. The National Development Policy 1991-2000 reinforces this and aims to attain a balanced development in order to create a more harmonious and equitable society. It stresses growth with equity to enable all Malaysians to participate in the mainstream of economic activities, so as to ensure political stability and national unity. In achieving these objectives, the National Development Policy 1991-2000 will cover the following essential directions:

- [1] striking an optimum balance between the goals of economic growth and equity;
- [2] ensuring a balanced development of the major sectors of the economy so as to increase their mutual complementarities to optimize growth;
- [3] reducing and ultimately eliminating the social and economic inequalities and imbalances in the country to promote a fair and more equitable sharing of the benefits of economic growth by all Malaysians;
- [4] promoting and strengthening national integration by reducing the wide disparities in economic development between states and between urban and rural areas in the country;
- [5] developing a progressive society in which all citizens enjoy greater material welfare, while simultaneously imbued with positive social and spiritual values, and an increased sense of national pride and consciousness;
- [6] promoting human resource development including creating a productive and disciplined labour force and developing the necessary skills to meet the challenges in industrial development through a culture of merit and excellence without jeopardizing the restructuring objectives;
- [7] making science and technology an integral component of socio-economic planning and development, which entails building competence in strategic and knowledge-based technologies, and promoting a science and technology culture in the process of building a modern industrial economy; and
- [8] ensuring that in the pursuit of economic development, adequate attention will be given to the protection of the environment and ecology so as to maintain the long-term sustainability of the country's development. (P.5)

As can be noted, Malaysia accentuates the need for balanced economic and social development for the country. It also points out the importance of human resource development, science, and technology in accomplishing these objectives.

Malaysia has established numerous schools to meet the growing educational needs of the country. It aspires to be a fully developed or industrialized country by the year 2020. It recognizes that human resources must be developed in order to keep pace with the growing demands for skilled and professional manpower of business, industry, government, and other professional organizations, and move toward its goal of becoming an industrialized nation by the next century.

The large number of Malaysian students studying overseas, however, indicates the need for expanding its institutions of higher learning to accommodate the growing need for higher education. It is recommended therefore that residential facilities and programs be considered in the development of community colleges in Malaysia. A community college is a multipurpose educational institution that can meet the educational needs of all classes of people with varying abilities. It is a unique American invention that has proven to be effective in meeting the rapid educational, social, and economic development of both industrialized and developing nations. Community colleges can enhance and complement the role of the other institutions of higher learning in Malaysia. Its establishment will contribute to and facilitate in the fulfillment of the country's goal of attaining balanced economic and social

development and ensuring political stability and national unity.

Recommendation 3: That Effective  
Organizational and  
Administrative  
Structure Be  
Developed

It is necessary that an effective organizational and administrative structure be developed for the community college. A model of this structure is shown in figure 9. The major functionaries include the board of trustees, the president, and the vice presidents for administration and finance, instruction (academic services), student services, and community services. The two staff functionaries who assist the president are the directors for public relations and institutional research and development.

An alternative structure based on the participational model is shown in figure 10. The merits of the participational model have been discussed in chapter 2. The participational model of governance, which provides for the participation in decision making by various groups within the institution, has been propounded by writers in community college governance in the last decade. There are multiple channels of communication to encourage two-way communication and problem solving in the organization. The various departments are interdependent with each other. The organizational structure is participatory rather than hierarchical.



# The Structure

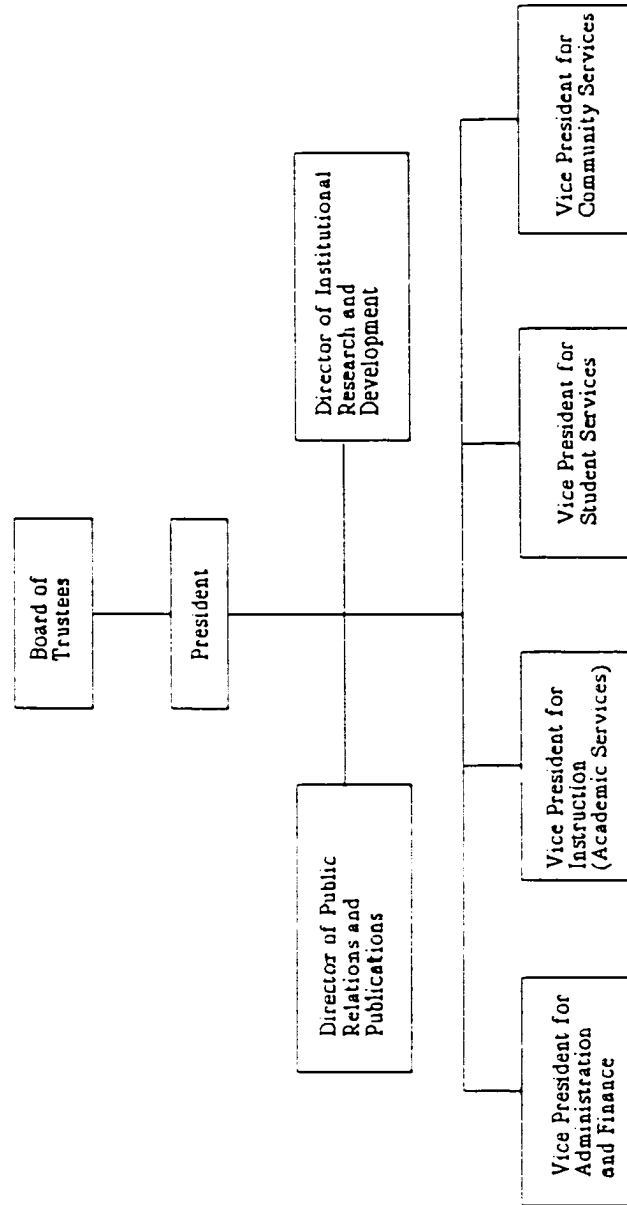


Fig. 9. Organizational Structure for Community Colleges in Malaysia

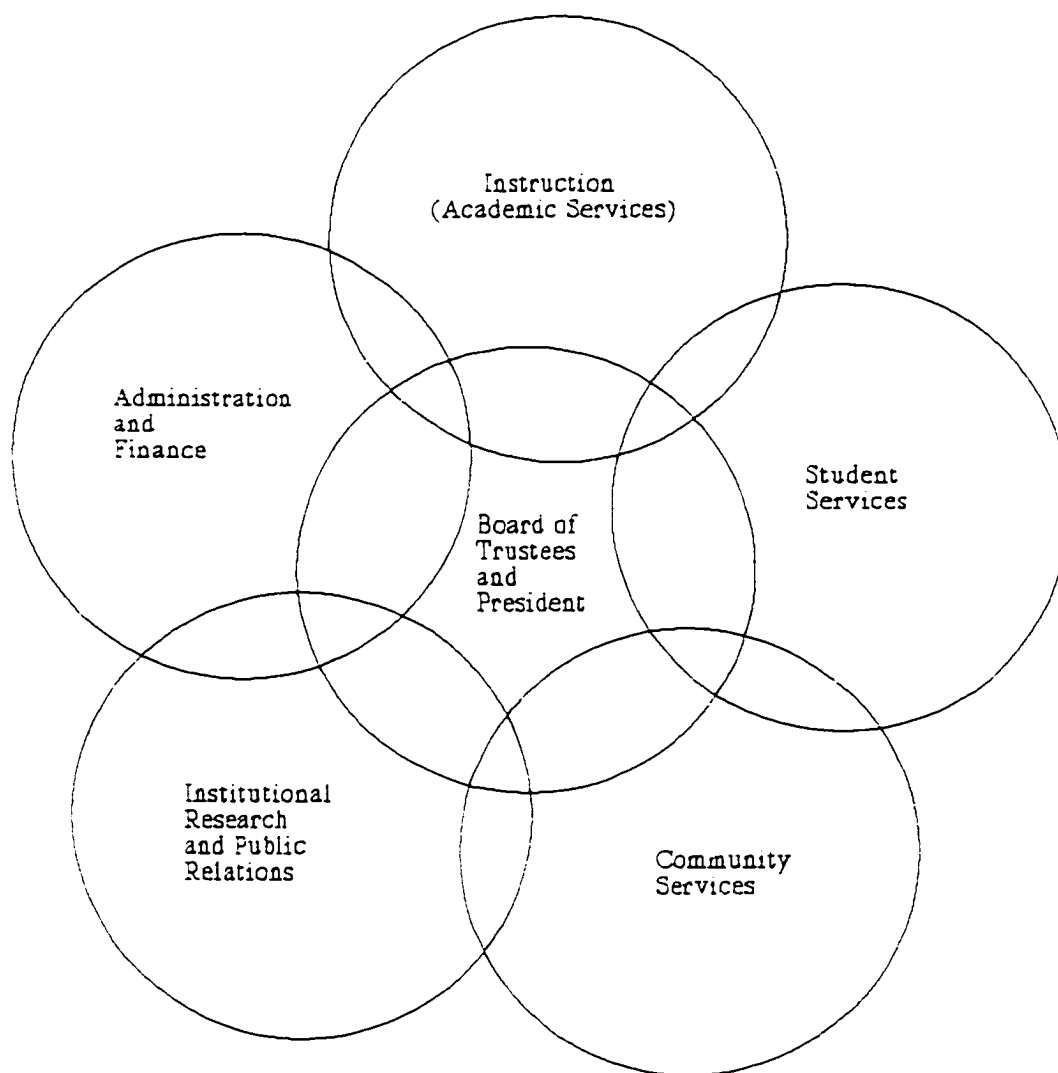


Fig. 10. An Alternative Organizational Structure Based on the Participational Model

In view of the cultural heritage of Malaysia, however, it is recommended that the organizational structures of the community colleges in Malaysia be based on the hierarchical model as shown in figure 9. Nevertheless, the model of governance of these colleges should be based on an eclectic approach where elements of Theories X, Y and Z are in operation at the same time (Silverman, 1987).

#### Board of Trustees

The function of the board of trustees includes the rights and powers to manage the community college and to direct its faculty and staff as provided by the laws of Malaysia. The board should also be responsible for appointing the president and for the executive management and direction of the college properties and facilities. Upon the recommendation of the president, the board shall be responsible for the (1) appointment, employment, and removal of personnel, (2) provision or elimination of the college curricula, programs, and services, and (3) the formulation or revision of the board's policies.

Criteria for the appointment or election of the board members should be as follows:

1. A member may be a resident of the area for not less than 3 years so that he or she is well acquainted with local problems and conditions.
2. There should be a racial mix.

3. Members should be civic-minded and committed to service on a community college board.
4. One or more members should have experience in higher education work.
5. Various religions should be represented in the total makeup of the board.
6. Persons from government, education, labor, business, industry, and the other professions should be represented on the board.
7. Members should have leadership experience or leadership ability.
8. Political affiliation should not be a criterion for board membership.

#### The President

The president is the chief executive officer of the college. The president's duties and responsibilities should include (1) administering board policies, (2) recommending policies and procedures to the board, (3) overseeing the major functional areas of the college which comprise administration and finance, instruction (academic services), student services, community services, public relations, and institutional research and development, and (4) making long-term plans, ensuring the accomplishment of the college mission and providing community leadership.

Essential qualities that the president should have as suggested by Evans and Neagley (1973, pp. 61-64) and Gleazer (1968, pp. 104-105), are:

1. Good judgment in selecting faculty and staff.

2. Ability to maintain high morale among faculty and staff.
3. A sensitivity to and understanding of people and skill in human relations that enable him to work successfully with individuals and with groups.
4. General intellectual leadership in the college and community.
5. Fairness and honesty in treatment of faculty.
6. Good judgment in promoting faculty and staff.
7. Ability to maintain a balanced budget.
8. Respect accorded to him by other educators.
9. Influence of his moral character on students and faculty.
10. Excellent physical and mental health with good emotional stability and self-control.
11. A high degree of organizational skill.
12. Creative in his approach, with broad wisdom, abundant courage, and great integrity.
13. Conviction of the worth and dignity of each individual for what he is and what he can become.
14. Appreciation of the social worth of a wide range of aptitudes, talents, interests, and types of intelligence.
15. Knowledge of the community structure and processes.
16. Ability to listen, understand, interpret, and reconcile. Capacity to communicate.

Apart from the above list of qualities, it is recommended that the president should have a doctorate degree and substantial experience in administration.

Vice President for Administration  
and Finance

The vice president for administration and finance reports to the president. As shown in figure 11, he/she is responsible for the administration of business operations, personnel, buildings and grounds, and auxiliary services. He/she directs through subordinate directors the various tasks and functions under his purview. He/she participates in the development of governance planning and implementation, development of operating procedures and practices to implement board policies, and consultations on new facilities planning and utilization of existing plant equipment and facilities.

Qualifications for this job should include (1) broad experience in all phases of school or college business administration, or executive level experience in business or industry; (2) experience in finance management, accounting, budgeting, materials management, personnel administration, and plant construction, facilitation, and operation; (3) experience in human relations, training, and labor negotiations; (4) some experience in planning and developing control systems; and (5) some experience as a teacher and/or administrator in an institution of higher learning. He/she should have at least a master of business administration degree with concentration in accounting.

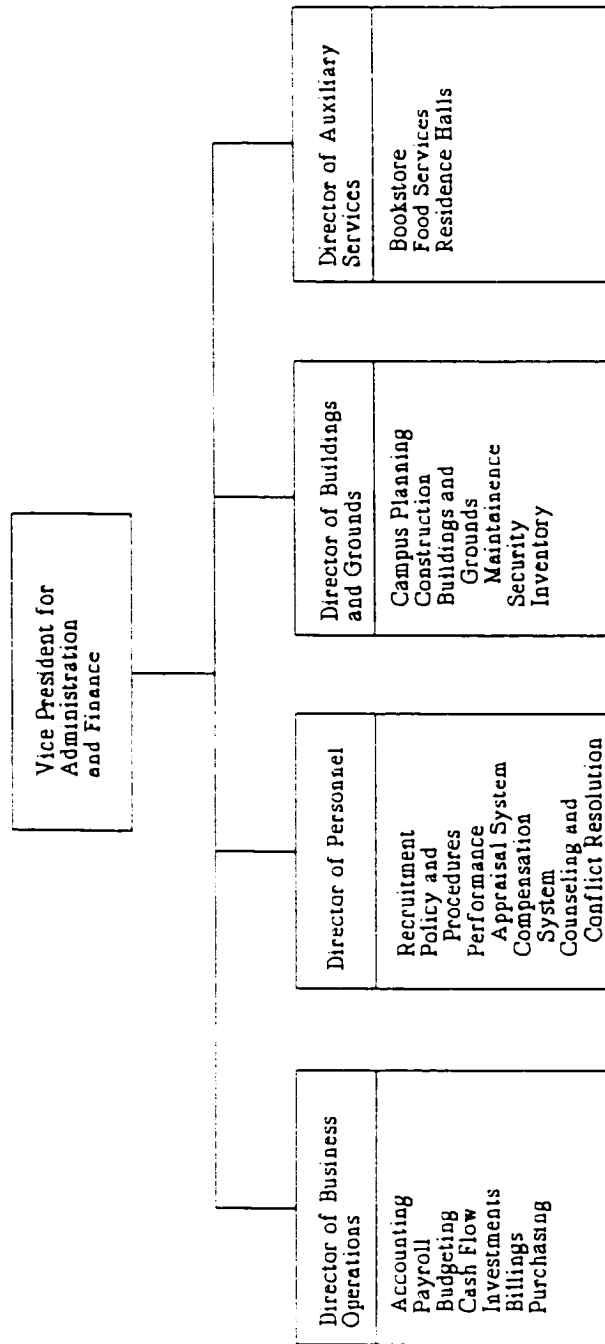


Fig. 11. Organizational Structure and Functional Areas of Administration and Finance

Vice President for Instruction  
(Academic Services)

The vice president for instruction (academic services) reports to the president. As shown in figure 12, he/she is responsible for the administration of the schools of arts and science and occupational education, and the learning resource center. He/she directs through subordinate functionaries the various tasks and functions under his purview. The academic services division is responsible for the delivery of academic and occupational programs related to the granting of diplomas and certificates. These programs are supported by the services of the learning resource center. It ensures that all the courses and programs are designed to meet the educational mission of the college and kept current with the changing needs of the community and nation.

The school of occupational education provides programs and courses to meet the educational needs of the business, industrial, and service sectors of the country. It comprises three departments: business, nursing and allied health education, and technology. It should establish a good relation with employers, the schools, and other colleges and universities by providing comprehensive educational services and opportunities to all students.



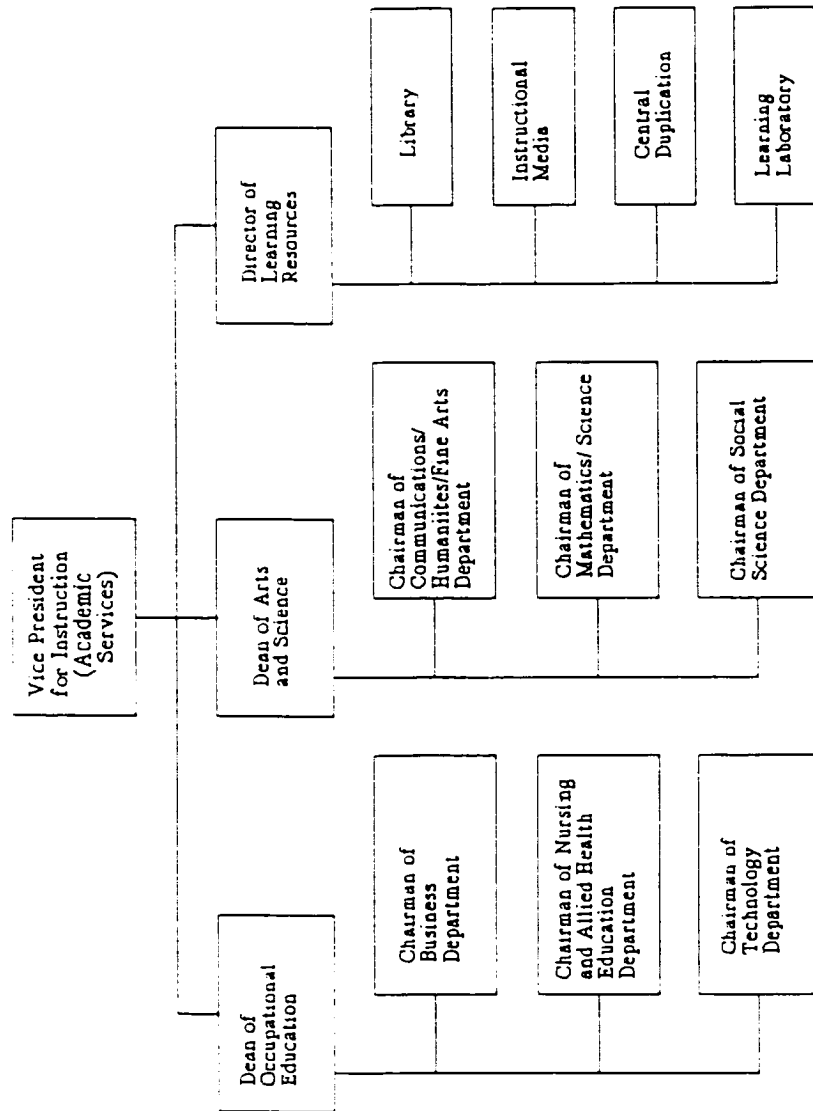


Fig. 12. Organizational Structure and Functional Areas of Instruction (Academic Services)

The school of arts and sciences should be responsible for delivering programs and courses to meet the needs of (1) developmental students preparing for college level work, (2) those who are planning to transfer to a 4-year college or university for further studies, and (3) those who must complete the general education program as a core requirement. It consists of the departments of communication/humanities/fine arts, mathematics and science, and social science. Students completing this program will be granted a diploma.

Supporting the schools of arts and science and occupational education is the learning resource center. The center comprises such facilities as the library, instructional media, learning laboratory, and central duplication services.

Qualifications for the job of vice president for instruction (academic services) should include: (1) leadership experience in secondary school work or higher education, (2) ability to relate well with both faculty members, staff, and students, (3) knowledge of community, government, labor, business, and other educational institutions, (4) shares the philosophies and mission of the community college, and (5) a doctorate degree.

#### Vice President for Student Services

The vice president for student services reports to the president. As shown in figure 13, he/she is responsible for three major functional areas of work: admissions

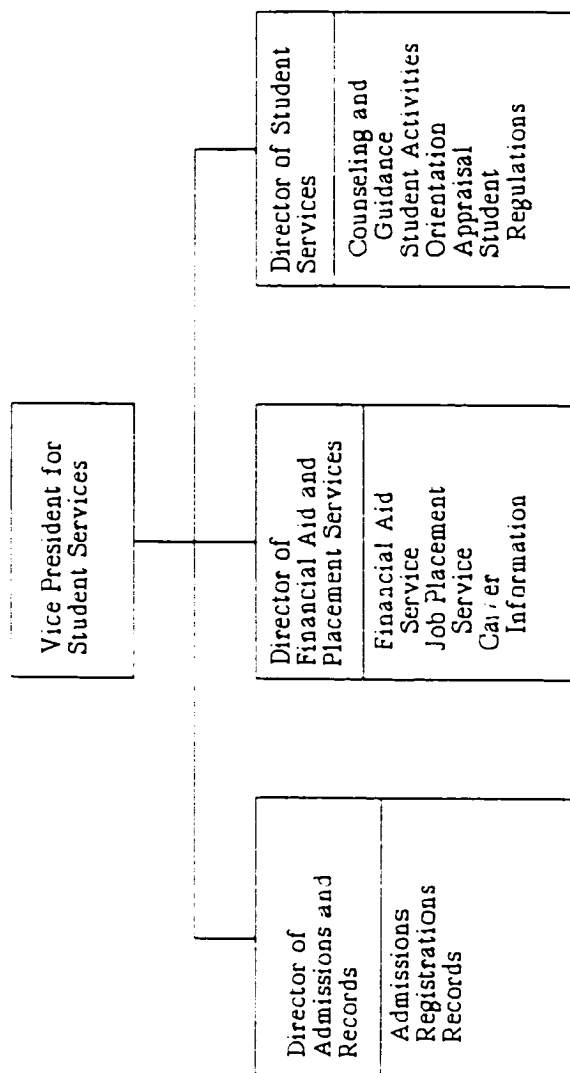


Fig. 13. Organizational Structure and Functional Areas of Student Services

and records financial aid and job placement, and student services. He/she directs these functions through subordinate directors. This division should be responsible for admission, maintaining student records and registration, and the development of the students. Under student services, the student is provided with counseling and guidance services to advise the student on his or her programs and general welfare in the college. The student undergoes various steps of orientation to acquaint himself with the college, facilities, services, faculty members, and other students. This will enhance his learning and social development. Proper guidance should be provided to the student so that he can complete his program as intended. The student services should also provide intramural and intermural and other recreational activities. The financial aid program can provide assistance to the disadvantaged students to enable them to continue and complete their education. The job placement service is also important to ensure that upon graduation the student will have employment.

The duties and responsibilities of the vice president for student services, as suggested by Evans and Neagley (1973, pp. 305-306), should directly or through the subordinate directors encompass the following:

1. To communicate an accurate image of the college as a means of informing oncoming students about opportunities at the college.
2. To acquire information about the student which is necessary for determining his eligibility for programs offered by the college.

3. To obtain relevant test information by which student potential and progress may be measured and by which the students and the college objectively make educational decisions.
4. To establish and maintain records of each students's achievements from which an accurate assessment of his performance can be made easily.
5. To officially enroll students and open their records with both more efficiency and validity.
6. To establish and maintain desirable levels and standards of student performance in order that both the students and the college strive for educational excellence.
7. To assist students in meeting the costs of college attendance in gaining scholarship recognition and in obtaining part-time or full-time jobs related to their college preparation.
8. To provide appropriate controls of social behavior, experiences in decision making through self-government, and activities outside the classroom which have an educative value.
9. To assist students in selecting study programs which will lead them successfully toward desirable educational goals.
10. To provide essential information and guidance economically to student groups.
11. To provide individualized help to students on problems of choice in order to develop maximum self-understanding.
12. To help students make appropriate vocational plans.
13. To foster college-wide concern for the general welfare of students.
14. To organize opportunities by which student personnel services staff can keep professionally informed in order that their counsel will have current validity.

15. To conduct research which continuously evaluates the effectiveness of student personnel services.
16. To provide a plan of organization that will facilitate effective services.

The qualifications for this position should include: (1) some working experience in student personnel services or school administration, (2) skills in human relations, and (3) at least a master's degree in educational psychology or educational administration.

#### Vice President for Community Services

As shown in figure 14, the vice president for community services reports to the president. He/she is responsible for two major functional areas: adult/continuing education, and community service. He/she directs these functions through subordinate directors. Community service is one of the unique functions of the community college. The task of human resource development is the main thrust of the college community service. Adult or continuing education is basically a people development program. It provides continuing education to adults who wish to continue their formal education or take short courses which interest them. It also provides occupational training to those who wish to attain skills in certain areas of interest. In a developing country like Malaysia, this program is an essential instrument in enhancing the literacy of the adult community members or of the general population as a whole. This service is a life-long learning program for all adults.

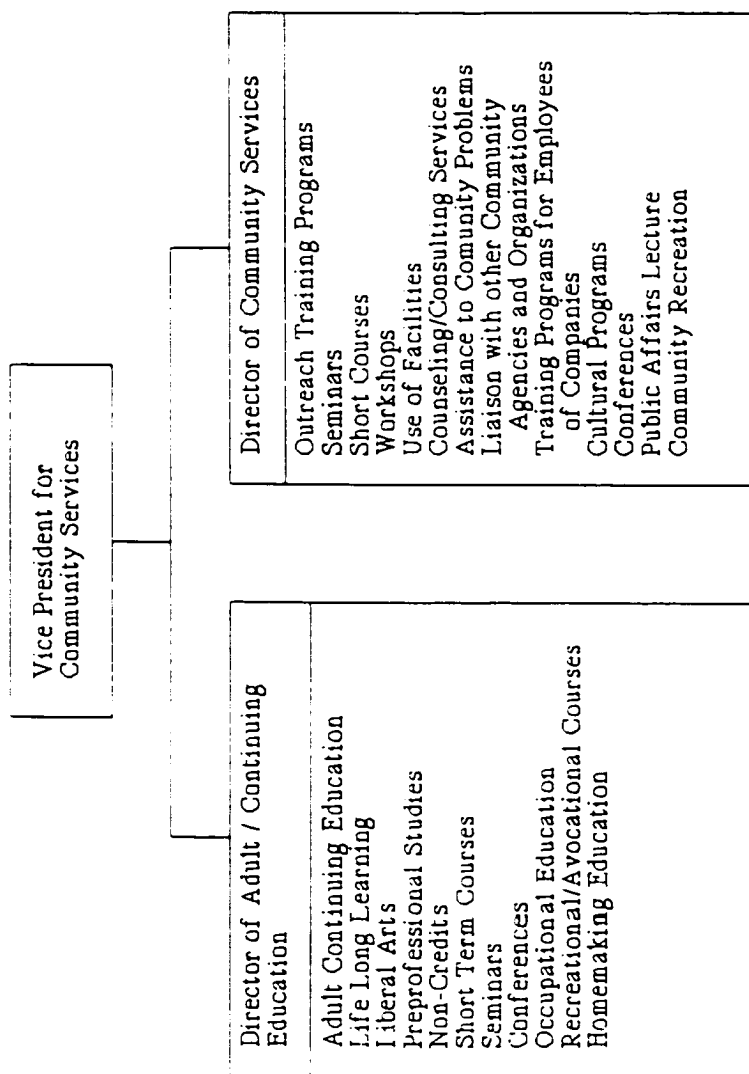


Fig. 14. Organizational Structure and Functional Areas of Community Services

The other community service functions include the college outreach training programs. The college should be a training center for employees of companies and other organizations that wish to make use of the college facilities. These programs include seminars, short training programs, workshops, and conferences. Community use of the college facilities for recreation, public affairs lectures and cultural programs makes the college an important catalyst for economic, cultural, social, and intellectual development in the community. Establishing close relationships with other community organizations and surrounding educational institutions will enable the college to provide its educational services to its community more effectively.

The qualifications needed for this position should include: (1) substantial working experience in human resource development, (2) excellent public relations, communication, and organizational skills, and (3) at least a master's degree in human resource development, or business, or educational administration.

#### Director of Institutional Research and Development

The director of institutional research and development reports to the president. This is a staff function which helps the president to know how the college is functioning. This department provides a self-study of the performance of the college. Institutional research is conducted to enable the college to improve its operations, and is directed to providing data that is necessary for the administrators to make intelligent decisions in improving the institution and in making long-range plans.



The function of this department focuses on the goals, students, faculty, curricula, facilities, administration, finance, and public relations of the college. It will assess whether the institutional goals are consistent with current social and economic conditions affecting the college. It will also determine whether the programs are consistent with the institutional goals and how well they are understood by the faculty and students.

The college needs to know its students so that it can develop and evaluate its policies, programs, and procedures. Knowing the nature of the student body will help the college to understand their intellectual competence, cultural backgrounds, personality traits, and educational aspirations. These studies will have implications for recruitment procedures, admission policies, educational programs, and teaching methods.

It also needs to study its faculty. The college will focus on their attitude and perception about teaching, academic responsibilities, productivity, teaching styles, and condition of faculty service. Assessment of the college curricula, facilities, administration, finance, and public relations is also made to ensure whether their objectives have been met.

The qualification for this position should include administrative experience in higher education with substantial experience in educational data processing. The director should have at least a master's degree in educational administration with a cognate in statistics.

### Director of Public Relations

The director of public relations reports to the president. It is a staff function that is responsible for maintaining public relations for the college. The director's functions cover news releases and features, college newsletters, public and media relations, publications and advertising, events promotions, and intercollegiate athletics and alumni relations. It should be the objective of this department to promote the college to the public and maintain a good relationship with the public mass media.

Qualifications for this position should include: (1) substantial experience in public relations or journalism, and (2) at least a baccalaureate degree in journalism.

### Recommendation 4: That Educational Programs and Services Be Developed Bearing in Mind the Local Conditions

The course programs for community colleges in Malaysia should be comprehensive. They should provide the two major programs: occupational education and liberal arts or general education. The occupational programs are offered by the business, nursing, and technology departments. The business department provides courses in business, secretarial science, and computer information systems. The nursing and allied health education department provides nursing and health education related programs. The technology department offers programs in the technical and

occupational fields. The duration of these programs range from a few months to 2 years. The short programs are awarded with certificates, while the 2-year programs are provided with diplomas. The occupational program is also called a terminal program because it terminates after 2 years. Upon graduation, the students will seek employment in business and industry. Working adults may use their diplomas as a means to earn promotion.

The liberal arts (or general education) is an essential program for those: (1) developmental students preparing for college work, (2) students who plan to transfer to a 4-year college or university to earn their baccalaureate degree, and (3) students who must complete the program as core requirements. Students who do not have the necessary secondary school certificate for entrance to university may fulfill the prerequisites under the developmental program. Those who cannot afford to go to university directly can benefit from the transfer program at the community college.

Apart from general education, transfer programs are also offered in some of the occupational programs which will enable the students to continue their higher education in their chosen fields after 2 years in a 4-year college or university. This will be efficient for the academically inclined students who plan to transfer to universities to pursue their studies in engineering, medicine, finance, and other professional fields.

Various steps should be taken in developing the programs of the college. The major determining factor should be based on the need of the community and the

nation as a whole. What are the main areas of needs for skilled and professional manpower in the various sectors of the economy? The input of businessmen, educators, politicians, students, professional organizations, and various other sections of the population are needed to ascertain the educational needs of Malaysia. The data can be gathered through surveys and interviews.

In a survey conducted by the researcher, Malaysian educators, politicians, and businessmen (50% and more) indicated a high need for the following transfer programs in the following professional fields: computer information systems, computer science, computer systems engineering, medical technology, agriculture, management, nursing, finance, communications, manufacturing administration, marketing, and pre-science-pre-medicine.

They (50% and more) indicated an average need for the following transfer programs in the following professional fields: engineering graphics, public relations, printing, management/marketing, sociology, librarianship, public administration, economics, real estate, pre-science, pre-law, pre-science-pre-veterinary, physical education, industrial design, surveying, social work, pre-engineering-electrical, pre-engineering, physical therapy, dietetics, biology, chemistry, interior design--liberal arts, advertising, journalism, pre-engineering-mechanical, accounting, mathematics, literature, art, recreation, pre-engineering-industrial, and architecture.

They (50% and more) also indicated a high need for the following

occupational programs: data processing (computer), banking and finance, electronics technology, business, marketing, and water and waste water technology.

And they (50% and more) indicated an average need for the following occupational programs: home economics, television servicing, real estate, fire technology, drafting technician, welding technician, machine tool, technician, criminal justice, corrections, cosmetology, criminal justice, law enforcement, automotive mechanic (theory), and automotive body and fender.

It is recommended that the above programs be offered by the community colleges in Malaysia. Apart from these, however, the liberal arts or general education programs should be offered. It is a prerequisite for those who plan to enter college level studies and those who plan to transfer to a university for a baccalaureate degree. The general education consists of Communication/Humanities/Fine Arts, Mathematics/Science, and Social Sciences.

The programs offered by the department of Communication/Humanities/Fine Arts include: Philosophy, Bahasa Malaysia, English, Chinese, Japanese, Journalism, Music, and Art. The programs of the department of Mathematics and Science include: Mathematics, Biology, Chemistry, Computer Science, Geology, Physics, and Physiology. And the Social Science department offers such programs as: History, Psychology, Sociology, Political Science, Religious Studies, Education, and Geography.

A more exhaustive study of the educational needs however, should also be conducted by the proposed community colleges in Malaysia.

Recommendation 5: That the Role of  
the Community Colleges As Feeder  
Institutions Be Considered

The community colleges in Malaysia should also serve as effective feeder institutions to the local universities. Students can fulfill the first two years of academic requirements at the community colleges before transferring to the universities to complete their baccalaureate degree. As feeder institutions, the community colleges will not only meet the needs of the financially disadvantaged students, but also assist the other institutions of higher learning to cater to the educational needs of the increasing secondary school graduates, and serve as sources of students to the local universities.

It is essential therefore that a strong liaison between the community colleges and local universities be established. This relationship is essential as the community colleges plan and organize their programs with the assistance and support of the local universities. It will also provide a smooth transferability of programs and students from the community colleges to the universities. Thus, the role of the community colleges as feeder institutions is vital in facilitating and complementing the functions of the other institutions of higher learning in Malaysia. This will also greatly enhance the effectiveness of the country's educational delivery system.

Recommendation 6: That the Role of  
the Community Colleges in Building  
Communities Be Included

The community colleges should play an important role in building communities. The American Association of Community and Junior Colleges, (1988, p. 7) defined building community as "a concern for the whole, for integration and collaboration, for openness and integrity, for inclusiveness and self-renewal."

In this effort, it pointed out that the community colleges should play a multifaceted role in serving their constituents. They should be concerned with helping students succeed in higher education. They should be open to students regardless of age, race or ethnic origins. They should provide life-long or continuing education programs for the citizens for new and different career preparation and life enrichment. They should provide excellent learning environment through good teaching. They should be committed to the building of communities beyond the classrooms.

The community colleges should also establish partnerships with other educational institutions such as schools, and senior colleges which will facilitate the transfer of students among these institutions. They should also develop partnerships with employers in meeting their employees' training needs. Government, community, and business leaders should also use the resources of the community colleges to promote economic development efforts.

The American Association of Community and Junior Colleges (1988) also suggested a new model of governance of community colleges. In building communities, the community college president should be creative, and provide leadership to the college beyond its day-to-day operations. The president should respond to challenges and create inspiring visions for the future. This involves collaboration, bringing together various constituencies, building consensus, and encouraging other members of the college to participate.

Due to the complexity of his or her job, the president needs a passion for the job, and support from within and outside the community college. The president has to be inspiring, visionary, and a coalition builder with strong management skills.

Thus, the American Association of Community and Junior Colleges (1988) proposed that "if community is to be built, faculty and administrators must have similar skills" (p. 42). In this new model of governance, "faculty leaders should participate actively in governance" (p. 43). The board of trustees should also help to build community.

Recommendation 7: That the Planning  
for the College Facilities Be  
Considered

In establishing the community college, it is necessary to have proper long-term planning for the college facilities. Evans and Neagley (1973, p. 180) suggested that



the planning committee should be responsible for the following tasks:

1. Evaluation and selection of architects.
2. Evaluation and acquisition of site(s).
3. Establishment of general architectural character, if the board desires to provide any guideline in this regard.
4. Identification of master planning and initial construction guidelines and limitations in such areas as enrollment capacity, budget, average class size, footage allowances, etc.
5. Determination of functional relationships of different facilities to each other on the proposed campus--the general orientation of such elements as major building complexes, parking, and athletic facilities.
6. Coordinate work of faculty and consultants in development of educational specifications--translating the educational program into a description of space needs.
7. Cooperation with architects in review, refinement, and approval of campus master plan, schematic design, and preliminary drawings.
8. Approval of final plans and specifications.
9. Bidding and awarding of contracts.
10. Continuous liaison with architects to make necessary decisions whenever problems and questions arise during the construction period.
11. Continuous inspection throughout construction period and acceptance of finished job.
12. Development and approval of specifications and arranging for purchase and installation of equipment and furniture.

Two task forces should be formed to plan the details of the college facilities. These are the philosophy and program task force and the facilities planning task force. The membership of the philosophy and program task force should include one or two college or university administrators, a school superintendent or secondary school principal, and several members from business, industry, government, and the other professions.

The membership of the facilities planning task force should include an architect, a district officer, one or two executives with building experience from business and industry, a facilities development administrator from a college, one or two members from the department of higher education, and a secondary school principal.

The first task of planning is educational planning. Educational planning must precede facility planning. Architects prefer to work on a project when they have the college educational specifications.

As Tadlock and Ebey (cited in Evans & Neagley, 1973, p. 182) stated:

The good architect has every right to expect that the college administration and faculty have been as industrious and exacting in their preparation of the educational plan as they expect him to be in the architectural plan.

Educational specifications must be developed for each facility. This task requires the input of staff, students, and the community. The educational specifications detail the educational requirements of the new facility for the architects and engineers to work on.

Evans and Neagley (1973, p. 184) also suggested that the educational specifications should contain the following information:

1. The educational philosophy and objectives of the community college.
2. The educational aspirations of the community.
3. Data concerning the number and ages of the students to be housed.
4. A brief explanation of the educational programs to be offered and the instructional procedures to be used.
5. A list of the number and kinds of facilities that are required, including future expansion.
6. Suggestions concerning the qualitative aspects of each space and area.
7. Affinities and relationships of the various facilities.
8. Activities that will take place in each area.
9. A list of the furniture and equipment for each space.
10. Special requirements of instructional and supervisory personnel.
11. Types and amounts of tack board, chalkboard, storage, and similar needs.

Some members of the educational planning task force should visit established community colleges to see their facilities and to obtain necessary information pertaining to preparation of educational specifications.

Selection of the architectural firm should be the next step in the planning

process. The selection of the right architect will ensure the success of the project. The selection of architectural services should be made early in the project. The architect can contribute in the site selection and in the development of the educational specifications for the campus. The architect should be able to determine which site is most economical and feasible to develop. During the writing of the educational specifications, the architect can gain a lot of information which will assist in the design of the structure better.

The criteria used in assessing the qualifications of the architectural firm as suggested by Evans and Neagley (1973, p. 195) are as follows:

1. Registration and reputation.
2. General experience and in particular experience in community college or other college designing.
3. Resources available, both human and material.
4. Methods of operation.
5. Amount of interest shown in project.
6. Past performance in terms of quality of work.
7. Reputation for designing good buildings that can be constructed at a reasonable cost.
8. Opinions of former clients.

An important method in obtaining information concerning the architectural firm is the use of a questionnaire. The information needed should include the following:

1. Name, address, and type of organization.
2. Brief history of the firm, including date established, record of growth, types of work, and any specialties.
3. List of principals and key staff, with the professional background, registration, and affiliations of each.
4. List of projects completed in recent years, giving type, size, cost, location, and dates.
5. List of references, including clients, contractors, and financial institutions.
6. Statement of philosophy and approach to the design and construction process.
7. Statement of policy in the handling or procedure of a project; participation of principals, assignment of personnel to project, engineering services, and other specialized services.
8. Copy of firm's brochure plus plans and photo-graphs of completed buildings. (1973, pp. 196-197)

The college administration should also provide the architectural firms that are invited to submit their qualifications for the project for evaluation the following pertinent information about the college and the project:

1. Name, address, and responsible administrative office of the client.
2. Name and phone number of the individual who will act as negotiator or contact.
3. Description of the project (or projects) under consideration, giving the size in terms of number of students, location, area required, and other information normally included in the educational planner's statement on program and space needs.

4. Time schedule proposed for the project(s).
5. Brief statement about the planning procedure to be used, the people to be involved, and the proposed assignment of responsibilities representing the client.
6. Description of the community, the educational system, and the resources available.
7. Brief statement of the educational philosophy on which the architectural planning should be based. (p. 197)

After the information about the architectural firms has been examined, some of them will be selected for a personal interview. In addition to the interview, the college board of trustees or the administrators should visit some of the projects that the architectural firms have completed and talk to their previous clients. Talking with the contractors who have constructed these projects can also be important. The board should also visit the offices of the architectural firms to evaluate firsthand their establishment and modes of operation.

Once all of these procedures have been carried out, the board of trustees should be in a position to select the architectural firm whom they think can do the job best. When the architectural firm has been selected, a formal agreement will be executed.

The services that the architectural firm should provide include: predesign planning, schematic design, design development, construction documents, bidding, and construction. The predesign planning is a stage when the architect assists in the

preparation of the educational specifications for the project. The schematic design is the phase when the architect translates the educational specifications into design documents such as drawings, sketches, words, or models. The design development is the stage when the floor plans, the structural systems, mechanical and electrical installations, services and equipment, building materials, and form and appearance of the buildings are drawn. A detailed cost estimate is also prepared for submission to government agencies for approval. The cost estimates of the project is reviewed and updated. When all the documentation and legal requirements have been completed, bidding for the construction of the project is made.

The architect provides assistance in securing bids and awarding of contracts for the project. During the construction, the architect will provide progress bulletins, continued on-site supervision, and interpretation of the contract.

The second task of the planning committee should be to evaluate and acquire the site for the college. Selecting the site for the community college is an important task. Experts in this field have suggested various criteria for site selection. Finley and Lahti (cited in Evans & Neagley, 1973, p. 201) suggested five factors: (1) cost, (2) location within community, (3) size of area, (4) availability of public utilities, and (5) access to major streets. Evans and Neagley (1973, pp. 201-202) stated that a more comprehensive list of criteria applicable to sites of all types of educational facilities has been recommended by the Council of Educational Facility Planners as follows:

1. Size and shape adequate for present and future enrollment.
2. As near as possible to center of pupil population, avoiding long travel distances.
3. Location to avoid traffic hazards, disturbing noises, smoke, dust, and odors.
4. Accessibility.
5. Availability of utility services.
6. Suitability of soil for building foundation and for vegetation.
7. Cost is reasonable--land optioned well in advance, if possible.
8. Contour fairly level, sloping away from buildings to assure good drainage.
9. Consideration of present and future school and community programs.
10. Environment.
11. Topography.
12. Aesthetic appeal.
13. Zoning and city planning regulations.
14. Preservation of vegetation, including trees.
15. Proximity to other educational and recreational institutions.
16. Proximity to safety facilities.
17. Suitable for construction.
18. Ample space on site for parking.



19. Availability for use in the educational program.
20. Industrial and commercial expansion.
21. Orientation in relation to climate.

Proper development of the college site needs to take into consideration the following principles:

1. Economy of construction, operation, and maintenance.
2. Safety and convenience in operation and use.
3. Attractiveness in overall appearance.
4. Adequate provision for the needs of the total man.
5. Facility groupings and affinities. (p. 203)

Economy in site development will help to save money not only in the cost of development but also the operation and maintenance aspects of the campus. Proper placement of buildings can reduce the cost on excavations, footings, and drainage. With proper planning, problems of erosion and surface water, which can damage building foundations, can be averted.

The safety and convenience factor in the planning of the locations of the various facilities in the campus is also necessary. This can provide the smooth and safe flow of people walking from one facility to another.

It is necessary to ensure that the appearance of the entire campus is attractive. The types of architecture, placement and relationships of buildings,

driveways, parking areas and play fields should contribute to the attractiveness of the campus. Planting must be planned for strategic locations on the site not only to beautify the campus but also to prevent soil erosion and serve as wind breakers and sun shields.

Consideration must also be made to ensure that the various facilities on the campus contribute to the total learning environment. They will endure long after the students have left the college. Thus, it is essential that there should be a balance between functional architecture and opportunities for display of healthy and natural sentiments of students and alumni.

The facility groupings on the campus is another important factor in the planning. There are two zones on the campus: the academic and the student activity. The academic zone includes the classrooms, laboratories, library and learning resources center, administration, faculty offices, and auditorium. The architectural character and planning of this zone should ensure that they be the quietest section of the campus. The student activity zone includes the student center, meeting rooms, and cafeteria. The architectural character of this zone should be one of friendliness and informality. The location of the learning resources center is also important; as it is the center of academic activity, it must be in a central location where students can easily converge for quiet hours of study.

Recommendation 8: That a Strong  
Funding Program of the  
Community Colleges Be  
Developed As the  
Nation Moves  
Toward 2020

Education in Malaysia is directly under the jurisdiction of the federal government. As such the funding of public community colleges in Malaysia will be derived mainly from the federal government and student tuition and fees.

In the case where a community college is jointly sponsored by public and private organizations, having obtained the necessary approval of the federal government, it is recommended that the main sources of funding should be from the local sponsors, endowments from public and private foundations and companies, tuition and fees, and government grants. The ratio of funding from these sources will have to be discussed and concurred among the various parties involved.

In the long term, however, it is recommended that a strong funding program for the community colleges be developed as Malaysia moves toward 2020. The financial accountability for developing and operating the community colleges needs a proper funding program. Sources for this allocation may come from local and state tax specially provided for funding the community colleges. Other funding sources should include grants and endowments from the private sectors. The private sectors, which will benefit greatly from the establishment of the community colleges, should be encouraged to contribute to this funding program.

Summary

In the preceding pages, the researcher has attempted to identify a great need in Malaysia for higher education by the increasing number of secondary school students. This problem is compounded by the growing demands for skilled and professional manpower in business, industry, government, and other professional organizations. The aspiration of the government to make the country a fully developed nation by the year 2020 has provided challenges in the development of solutions to this problem.

In solving the problem, the researcher has recommended the establishment of community colleges throughout the country to meet the needs of the citizens of Malaysia. A model for the organization, administration, and programs for the community college has been provided. It details the philosophy, purposes, functions, organizational and administrative structure of the college, and the job descriptions and qualifications of the major functionaries. It also suggests the steps and considerations to be made in the facility planning of the college.

Although these plans have been designed specifically for community colleges in Malaysia, they may be adopted with required changes to meet the educational needs in other countries.

## CHAPTER VI

### SUMMARY, CONCLUSIONS, AND SUGGESTIONS

#### Introduction

##### Purpose of the Study

The purpose of this study was to develop a model for the organization, administration, and programs for community colleges in Malaysia. The study also attempted to assess the need for the community college system in Malaysia, and the course programs that are needed as perceived by selected Malaysian educators, politicians, and businessmen.

##### Sources of Data

Information for this study was derived from (1) the review of related literature, (2) interviews with community college administrators, (3) interview with the administrator of higher education of Malaysia, and (4) a survey on the perceptions of selected Malaysian educators, politicians, and businessmen pertaining to the importance of such issues as education, human resource development, usefulness of community colleges in Malaysia, and educational programs needed to meet Malaysia's need for

skilled and professional manpower. Other literature pertaining to Malaysia and relevant government policy materials such as the Sixth Malaysia Plan 1991-1995 and National Development Policy 1991-2000 were also reviewed.

### Answers to Questions Raised

The following statements are presented in answer to the questions raised in chapter 1 of this study. They are based on the information gathered from the review of related literature, interviews with community college administrators, and a survey on the perceptions of selected Malaysian educators, politicians, and businessmen pertaining to the need for community colleges in Malaysia as detailed in chapter 3 of this study.

#### Question 1: What Are the Characteristics of a Community College in the United States?

A list of the characteristics of a community college was provided earlier in the study. The characteristics of a community college are as follows:

1. It is a part of higher education.
2. Its main source of financial support comes from the state.
3. It is nonselective and has an open-door policy on admission.
4. It is accessible to all students.
5. Its tuition fees are low.

6. It serves all members of the community.
7. It provides comprehensive programs and services to meet the educational needs of students and community.
8. It is usually nonresidential and nearly all students commute.
9. It offers a variety of semi-professional and occupational or technical programs.
10. It provides services to aid the undereducated students of post-high school age.
11. It is established and operated under standards set at the state level.
12. It is locally initiated and controlled with state participation to maintain standards.
13. It has a separate and distinct district board, facilities, and budget.

Question 2: What Are the Purposes and Functions of a Community College in the United States?

The following is a summary of the purposes and functions of a community college in the United States.

1. It prepares students for advanced study. This is called the transfer program which is the first 2 years of an academic program that is provided in a 4-year college or university. It also provides transfer programs in the professional fields which

will lead to a baccalaureate degree in a university. Students, who wish to pursue their higher education beyond the 2 years of college work, will enroll in the transfer program.

2. It provides occupational education. It is also called a terminal program because it terminates after two years. It provides a variety of occupational skill programs that range from a few months to 2 years duration. The objective is to equip students with employable skills that are needed in business and industry.

3. It provides general education. This program consists of the arts and sciences and basic education. The arts and sciences, or liberal arts, include communications, humanities, fine arts, mathematics and science, and social science. These intellectual disciplines are intended to assist the students in becoming well-informed and cultured persons, well adjusted members of society, and effective citizens. This program also provides basic education for those preparing for college level work.

4. It provides guidance and counseling services to the students. While the students are in college, they are provided with information, advice and counsel in orienting themselves with their (1) environment, (2) their educational programs, (3) their social, physical, and mental development and welfare, (4) financial aid, and (5) job placement upon graduation. The purpose is to ensure that they not only succeed in their studies, but also develop a sense of responsibility and good citizenship.



5. It provides community services. It extends its educational programs outside its campus by reaching to the community. It provides adult or continuing education. It also works with various organizations in the community to meet the training needs of their employees. It provides community use of its facilities for such activities as cultural programs, campus conferences, public affairs lectures, speakers' bureaus, short courses, community recreation, campus tours, and special events. These services make the community college the center of intellectual, social, economic, and cultural life in the community. It helps in building communities and in nation building.

Question 3: What Are the Organizational and Administrative Structures and Tasks of the Community Colleges in the United States?

A summary of the organizational and administrative structures and tasks of community colleges in the United States is as follows:

They have a board of trustees and a president. Under the president are the vice presidents who manage four areas of services. These services include:

(1) administration and finances, (2) instruction (academic services), (3) student services, and (4) community services. Two separate staff functions to the president consist of the public relations and institutional research and development departments.

Large community colleges (10,000 students and more) have an executive vice president who reports to the president. The academic and student services are under

one vice president. They also have a line function for research, planning, and development headed by a vice president. The other major line function is the administration and finance division which is headed by a vice president.

The main areas of work under the vice president for administration and finance include (1) the business operation, (2) personnel, (3) buildings and grounds, (4) college facilities, (5) bookstore, and (6) controller. The vice president for instruction manages the schools of arts and sciences, occupational education, and the learning resources center. The major functions under the vice president for student services include: student development/counseling, student records, admissions, financial aid, and job placement. The vice president for community services oversees the adult or continuing education programs and the various community services rendered by the college to the community.

Question 4: What Are the  
Programs and Services of  
a Community College in  
the United States?

The major programs and services provided by a community college in the United States consist of the transfer, occupational, general education programs, and community services. Its programs are multipurpose. It provides: (1) basic education to the under educated, (2) advanced or transfer education for the academically and professionally inclined students, and (3) occupational education to those who wish to

gain certain employable skills that are needed by business and industry. It provides general education to build the students so that they become well informed, well adjusted, cultured, and responsible citizens. Its community services meet the educational needs of the members and business and industrial organizations of the community.

Question 5: Is There a Need for  
a Community College System  
in Malaysia?

Based on the data obtained from the survey that was conducted to assess the perceptions of selected Malaysian educators, politicians, and businessmen pertaining to this issue, community colleges are highly regarded by them. They believe that community colleges are needed and useful for Malaysia to meet the growing need for higher education among secondary school graduates, and the rising demands of business, industry, government, and professional organizations for skilled and professional manpower. The need for the establishment of community colleges in Malaysia is widely accepted.

Question 6: What Should Be  
the Course Programs of  
the Community Colleges  
in Malaysia?

From the analysis of the survey data, perusal of government policy materials

such as the Sixth Malaysia Plan 1991-1995 and National Development Policy 1991-2000, and the interview with the administrator of Higher Education of Malaysia, there is a high correlation for the need of the educational programs related to the business, computer, medical, and technical areas. These programs are specified in recommendation 3 of chapter 5.

These needs are closely related to the economic development of the country. Provision of these programs by the community colleges in Malaysia will not only be useful, but also timely and essential in meeting the needs for skilled and professional manpower of the various sectors of the economy, and facilitating and complementing the functions of the other institutions of higher learning.

### Conclusions

Malaysia's institutions of higher learning provide skilled and professional manpower required by the country. The large number of Malaysian students studying overseas, however, indicates a need for expanding the extant institutions of higher learning. The country's aspiration of becoming a fully developed nation by the year 2020 augments the challenges in meeting this goal. Malaysia is committed not only to becoming an industrialized country by the turn of the next century, but also to eradicating poverty, increasing the standard of living of its people, and achieving balanced economic development, political stability and national unity.

The role and importance of education and human resource development as key instruments in realizing these goals cannot be overemphasized. They are an integral part of the country's economic development.

In this effort, the establishment of community colleges in Malaysia to facilitate and complement the roles of the extant institutions of higher learning is timely and essential. Since there are no community colleges in Malaysia, the researcher has provided a model for the organization, administration, and programs for community colleges in Malaysia. This model can serve as a basis and resource in consideration for establishing community colleges in Malaysia.

A community college is a multipurpose educational institution. It serves all levels of people with varying abilities. It is accessible to all people. It meets the educational and training needs of all people and organizations. It helps to build communities and the nation. It has become an effective tool in meeting the needs in the educational, social, cultural, and economic development of both industrialized and developing countries.

The establishment of community colleges in Malaysia will greatly benefit the people and the country, as it marches toward its goal of becoming an industrialized nation by the year 2020. It will also enhance the nation's efforts of achieving balanced economic development, political stability, and national unity.

### Suggestions

In addition to the recommendations proposed in chapter 5, the following suggestions are also made:

1. Further research should be conducted by the relevant government agencies or private organizations to identify the specific educational and training needs of the various communities and states of Malaysia as perceived by community, political, business, and educational leaders.
2. Able secondary school graduates should be provided government scholarships, over the next 5 to 10 years, to pursue their higher education locally or overseas in specific areas of educational needs such as computer-related, industrial/technical-related, medical-related, and business-related not only to meet the skilled and professional manpower needs of the country, but also to serve as faculty members of the community colleges in Malaysia.
3. The private sectors should be encouraged to establish community colleges. Government accreditation of these colleges should be readily granted so that all citizens can benefit from the educational opportunities and programs offered by these institutions.
4. The establishment of community colleges in Malaysia should be considered as an urgent national need to meet the growing demands for skilled manpower of the business and industrial sectors.

## APPENDICES

## APPENDIX A

### COVER LETTER FROM THE RESEARCHER



550 Maplewood Ct. Apt. E-71  
Berrien Springs,  
Michigan 49103, U. S. A.

5hb. Julai, 1991

Datuk/Tuan/Puan,

Saya adalah seorang warganegara Malaysia yang sedang menyediakan sebuah kertas kerja (dissertation) dalam bidang Pentadbiran Pendidikan untuk Sarjana Doktorat, di Andrews University, Michigan, Amerika Syarikat. Bidang kajian ini merupakan sebuah rangka contoh penyusunan, pentadbiran dan aturcara kolej-kolej masyarakat (community colleges) di Malaysia. Oleh yang demikian, saya ingin meminta pendapat tuan, dalam soal-selidik (questionnaire) yang disertakan ini. Sebagai tokoh rancangan-rancangan strategi pembangunan dinegara kita, maka tuan telah pun terpilih untuk menjawab soal-selidik ini. Sumbangan tuan dalam kajian ini kelak akan sangat-sangat menguntungkan negara kita.

Bersama ini disertakan: (i) surat daripada penasihat saya; (ii) satu set kertas soal-selidik; dan (iii) sampul surat berselem dengan alamat saya yang penuh. Kertas soal-selidik tersebut menerangkan secara ringkas mengenai ciri-ciri kolej masyarakat, dan lebihnya merupakan tersedia diterangkan (self-explanatory). Tuan dikehendaki menandakan (✓) keatas jawapan yang dianggap sesuai kedalam petak yang disediakan. Soal-selidik ini adalah ringkas dan lengkap dan hanya mengambil lebih kurang 10 minit masa emas tuan. Selepas menjawab soalan-soalan tersebut, sila masukkan kedalam sampul surat yang telah disediakan dan poskan.

Semua jawapan tuan adalah dirahsiakan. Walaubagaimanapun, sekiranya tuan ingin mendapat salinan keputusan kajian ini, saya akan dengan rela menghantarkannya kepada tuan kelak.

Kerjasama tuan dalam perkara ini sangat-sangat dihargai dan diucapkan ribuan terima kasih. Saya sangat-sangat berharap agar dapat menerima soal-selidik tersebut dengan sergera.

Yang benar,

B. Thadius Gaban



ANDREWS  
UNIVERSITY

550 Maplewood Ct. Apt E-71  
Berrien Springs  
MI 49103  
U. S. A.

July 5, 1991

Dear Datuk/Sir/Madam:

I am a Malaysian student who is presently working on a dissertation for a doctoral degree in educational administration and supervision at Andrews University in Michigan, U.S.A. The area of my study is on community college. Because it relates to Malaysia, I would like to seek your kind input in the enclosed questionnaire. As leaders in our country's strategic development programs, you have been selected in this survey. Your contribution in this study will be of paramount importance to our country.

Enclosed herewith are: (i) a letter of introduction from my advisor, (ii) a set of questionnaires, and (iii) a stamped self-addressed envelope. The introduction in the questionnaire explains briefly the characteristics of a community college. The rest is self-explanatory. You will tick (✓) your response in the appropriate box. The questionnaire is simple and concise and should take only about ten minutes of your precious time to complete. After completing the questionnaire kindly seal it in the enclosed stamped, self addressed envelope and post it to me.

Your input will be treated with the strictest confidentiality. You need not put in your name.

I thank you very much for your kind assistance. I look forward to receiving your completed questionnaire soon.

Yours sincerely,

B. Thadius Gaban

---

Berrien Springs, Michigan 49104-6160 413-7771

## APPENDIX B

### LETTER OF INTRODUCTION FROM THE RESEARCHER'S DOCTORAL COMMITTEE CHAIRMAN



ANDREWS  
UNIVERSITY

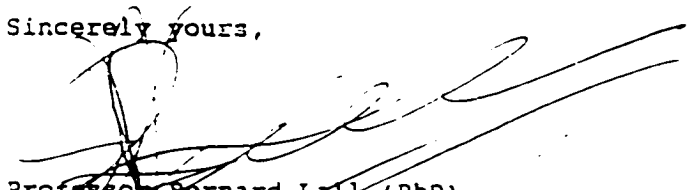
July 5, 1991

To Whom It May Concern

Mr. B. Thadius Gaban is presently working for his doctorate degree in educational administration and supervision at Andrews University. He is also in the process of writing his dissertation. His dissertation study pertains to community college. He has returned to Malaysia to conduct his survey among businessmen, politicians and educators. I am indeed pleased that he has undertaken a study that is of paramount importance to his country and academia. Your input in this questionnaire is essential.

We would appreciate it very much if you could kindly assist him in this survey.

Sincerely yours,



Professor Bernard Lall (PhD)  
(Chairman of B. Thadius Gaban's  
Doctoral Committee)

## APPENDIX C

### QUESTIONNAIRE MAILED TO SELECTED MALAYSIAN EDUCATORS, POLITICIANS AND BUSINESSMEN

## Educational Needs Survey in Malaysia

### I. Introduction

This survey attempts to investigate the perceptions of Malaysian educators, businessmen and politicians, on the need for community colleges that could enhance and facilitate the process of human resource development in Malaysia.

A community college can be briefly characterized as a two-year institution of higher learning. It offers both transfer and occupational programs. Transfer programs are equivalent to the first two years of a 4-year college or university, so that students can continue their studies for their bachelors degree. Occupational programs provide semi-professional and technical training skills to students who may seek employment in business, industry and other professions after graduation. The community college is open to working adults who may want to continue their education to acquire the necessary qualifications that are needed for career advancement and changes.

It is nonresidential and tuition fees are low which will enable disadvantaged students, who cannot otherwise afford to attend other institutions of higher education, to continue their studies. It provides guidance and counseling service to students on matters pertaining to course programs, career plans and personal counseling. It also provides community services such as community use of college facilities and services; community educational services; community development; and cultural and recreational activities.

The community college movement originated from the United States of America in the early 1900s. Since then it has spread to other advanced and developing countries such as Japan, U. K., Canada, Australia, Germany, China, Taiwan, Kenya, Mexico, Jordan, Philippines and others.

II. Demographic Information

(Please check the appropriate box)

1. Gender:      Male ☐              Female ☐
2. Profession: Educator ☐      Politician ☐      Businessman ☐  
                  (Education officer,      (Minister,      (Chief Executive  
                  School principal,      Assistant      Officer, Managing  
                  University      Minister, M.P.      Director, General  
                  professor)      Assemblyman)      Manager, Chairman)
3. Years of cumulative working experience:      1-5 years ☐  
                  6-10 years ☐              11-15 years ☐  
                  16-20 years ☐              20 years and over ☐
4. Highest academic qualification attained:  
                  Secondary School ☐              College Diploma ☐  
                  Bachelors Degree ☐      Masters Degree ☐      Doctorate ☐
5. Age:      20-30 ☐      31-40 ☐      41-50 ☐      over 50 ☐

III. General Instructions:

1. In each of the following list of statements tick (✓) in the appropriate box which represents your best answer.
2. Tick (✓) under SD if you strongly disagree.
3. Tick (✓) under D if you disagree.
4. Tick (✓) under A if you agree.
5. Tick (✓) under SA if you strongly agree.

		SD	D	A	SA
1.	Malaysia regards education as a key to development.				
2.	Malaysia aims to eradicate poverty through education.				
3.	Malaysia believes that human resource development and economic development are closely related.				
4.	Every individual should be given the opportunity to reach his/her full potential.				
5.	More colleges are needed in Malaysia to cater to the increasing number of secondary school graduates.				
6.	Malaysia's growing industrialization demands more college educated workers.				
7.	Malaysia needs community colleges to help enhance its efforts of meeting the growing demand for skilled manpower.				
8.	Community colleges for Malaysia are useful because they:				
	1. Offer educational opportunities to disadvantaged secondary school graduates.				
	2. Provide occupational skills in semi-professional fields.				
	3. Serve as stepping stones for motivated students to continue their education in universities.				
	4. Meet the needs for skilled manpower in business, industry and other profession.				
	5. Cater to the educational needs of secondary school graduates.				
	6. Meet the educational needs of working adults to attain specific qualifications for career advancement and change.				
	7. Contribute to the intellectual and cultural activities of their communities.				
	8. Prepare students to assume responsible roles as citizens.				



9. There is a need for the following programs that will lead to degree qualification:  
(Please tick (✓) your response in the appropriate box)

ITEM		Low Need	Average Need	High Need
1.	Accounting			
2.	Advertising			
3.	Agriculture			
4.	Architecture			
5.	Art			
6.	Aviation			
7.	Biology			
8.	Business Administration			
9.	Chemistry			
10.	Communications			
11.	Computer Information Systems			
12.	Computer Science			
13.	Computer Systems Engineering			
14.	Criminal Justice			
15.	Dietetics			
16.	Economics			
17.	Engineering Graphics			
18.	English			
19.	Fashion Merchandising			
20.	Finance			
21.	Forestry			
22.	History			
23.	Industrial Design			
24.	Industrial Education			
25.	Interior Design - Liberal Arts			
26.	Journalism			
27.	Librarianship			
28.	Literature			
29.	Management			
30.	Manufacturing Administration			

31.	Marketing			
32.	Mathematics			
33.	Medical Technology			
34.	Nursing			
35.	Paper Science/Engineering			
36.	Pharmacy			
37.	Physical Education			
38.	Physical Therapy			
39.	Physician's Assistant			
40.	Physics			
41.	Political Science			
42.	Pre-Engineering			
43.	Pre-Engineering-Electrical			
44.	Pre-Engineering-Industrial			
45.	Pre-Engineering-Mechanical			
46.	Pre-Law			
47.	Pre-Science			
48.	Pre-Science-Pre-Dentistry			
49.	Pre-Science-Pre-Medicine			
50.	Pre-Science-Pre-Optometry			
51.	Pre-Science-Pre-Veterinary			
52.	Primary Education			
53.	Printing Management/Marketing			
54.	Psychology			
55.	Public Administration			
56.	Public Relations			
57.	Real Estate			
58.	Recreation			
59.	Secondary Education			
60.	Social Work			
61.	Sociology			
62.	Surveying			
63.	Travel/Tourism			
64.	Wild-life Management			

10. There is a need for the following occupational or semi-professional certificate and diploma programs that are 2 years or less: (Please tick (✓) your response in the appropriate box)

ITEM		Low Need	Average Need	High Need
1.	Accounting			
2.	Agriculture Business			
3.	Automotive Body and Fender			
4.	Automotive Mechanics (theory)			
5.	Automotive Technician			
6.	Banking and Finance			
7.	Business, Marketing			
8.	Cosmetology			
9.	Criminal Justice, Corrections			
10.	Criminal Justice, Law Enforcement			
11.	Data Processing (computer)			
12.	Drafting Technician			
13.	Early Childhood Education			
14.	Electronics Technology			
15.	Fashion Merchandising			
16.	Fire Technology			
17.	Home Economics			
18.	Machine Tool Technician			
19.	Professional Photography			
20.	Real Estate			
21.	Television Servicing			
22.	Water and Waste Water Technology			
23.	Welding Technician			

If you need the result of this survey, please tick the appropriate box:

Yes ☐ No ☐

Please add any other comments that you may have:

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APPENDIX D  
FOLLOW-UP LETTER



## ANDREWS UNIVERSITY

550 Maplewood Ct.  
Apt. E-71  
Berrien Springs  
MI 49103

October 10, 1991

Addressee

Dear Datuk/Sir/Madame:

In July 1991, I sent you a questionnaire, pertaining to community college, with a stamped, self-addressed envelope. To those who have returned your input, I thank you very much for your assistance. To those who still have not, I would appreciate it if you could kindly spend a few minutes of your precious time to fill in the questionnaire and return it to me as soon as possible.

Thanking you for your kind assistance.

Sincerely yours,

A handwritten signature in cursive script, which appears to read "Thadius Gaban".

Thadius Gaban

---

Berrien Springs, Michigan 49104-0616 471-7771

## APPENDIX E

### INTERVIEW QUESTIONS FOR ADMINISTRATOR OF HIGHER EDUCATION IN MALAYSIA

Interview Questions for Administrator of  
Higher Education in Malaysia

Date: July 30, 1991

Interviewee: Dr. Syed Mohd bin Syed Abdul Kadir

1. What is the government's policy on higher education?
2. How do you set up an institution of higher learning?
3. How do you implement an approved government educational project and policy?
4. Who decides as to when a college or university should be established?
5. What is the projected need for skilled manpower in Malaysia over the next ten years?
6. What are the areas of manpower needs over the next three to five years and beyond?
7. What is the projected number of secondary school graduates annually over the next five years?
8. Are existing institutions of higher learning adequate in catering for the motivated secondary school graduates in pursuing their higher education?
9. Are there any projected institutions of higher learning going to be set up in Malaysia over the next five to ten years. If so, how many and where will they be set up?
10. What are the requirements for entrance into the local universities?

APPENDIX F

INTERVIEW QUESTIONS FOR ADMINISTRATORS  
OF COMMUNITY COLLEGES IN  
MICHIGAN, U.S.A.



Interview Questions for the Presidents/Vice Presidents  
of Community Colleges in Michigan, U.S.A.

List of Interviews

<u>Dates</u>	<u>Interviewees</u>
September 16, 1991	Mr. David C. Briegel (President, Southwestern Michigan College)
September 18, 1991	Mr. Robert Rimkus (Vice President for Administration and Finance, Kellogg Community College)
September 23, 1991	Dr. Anne E. Mulder (President, Lake Michigan College)
October 31, 1991	Dr. Cornelius Eringaard (Executive Vice President, Grand Rapids Community College)
November 6, 1991	Dr. Dale M. Herder (Vice President for Academic and Student Affairs, Lansing Community College)

1. What is a community college and how different is it from other institutions of higher learning?
2. Who are your students?
3. What is your admission policy?
4. What programs do you offer?
5. How is a community college initiated and organized?
6. What is the organizational structures of this community college? Do you consider this to be a large sized, medium sized or small sized community college?
7. What is the administrative structure for a
  - (1) small sized community college;
  - (2) medium sized community college; and
  - (3) large sized community college?
8. How does a community college provide community services?

APPENDIX G

LETTER TO PANEL MEMBERS



## ANDREWS UNIVERSITY

550 Maplewood Ct.  
Apt. H-67  
Berrien Springs  
MI 49103

March 10, 1992

Addressee

Dear

As part of my dissertation, I have proposed a model for the organization, administration and programs for community colleges in Malaysia.

You have been selected to be a member of the panel of experts which will study and evaluate the proposed model, a copy of which is enclosed herewith.

I recognize that you are a very busy person, but I would appreciate very much your taking a few minutes of your time to look it over and express your opinion concerning it.

The community colleges of Malaysia can benefit from your experience and ability. I would therefore be most grateful if you could kindly comment on the recommendations. For your convenience I have enclosed a return stamped, self-addressed envelope.

Wishing you success in your work, I remain

Cordially yours,

A handwritten signature in cursive script, appearing to read "B. Thadius Gaban".

B. Thadius Gaban  
(Doctoral Candidate,  
School of Education)

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Berrien Springs, Michigan 49104-6160 471-7771

APPENDIX H  
LETTERS FROM PANEL



Cornelius Eringaard, Executive Vice President

March 20, 1992

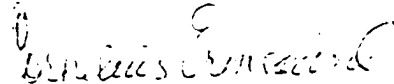
Mr. B. Thadius Gaban  
550 Maplewood Ct.  
Apt. H-67  
Berrien Springs MI 49103

Dear Mr. Gaban,

Please find enclosed some comments regarding your proposal. I assume that you were cognizant of these considerations when you set about your task. I believe with the enclosed adjustments you might have a good document and/or proposal. You must be careful to consider the culture and value system of the society in your efforts or you will encounter the "Ugly American Syndrome."

Good luck in your endeavor.

Sincerely,

  
Cornelius Eringaard  
Executive Vice President

CE/jb

1430 Boscawen NE  
Grand Rapids  
Michigan 49503-3245  
Telephone (616) 771-1405  
Fax (616) 771-1407

**Kellogg Community College**  
 450 North Avenue  
 Battle Creek, Michigan 49017-3397  
 (616) 965-3931 Fax: (616) 965-4133



March 31, 1992

Mr. Thadius Gaban  
 550 Maplewood Ct.  
 Apt. H-67  
 Berrien Springs, Michigan 49103

Dear Mr. Gaban:

I apologize for not responding to your earlier request but I have been extremely busy in the last few weeks.

I have reviewed your paper and I have two major concerns after my review:

1. I strongly feel that the individual within the proposed organizational structure responsible for financial administration should have an advanced degree, preferably in the area of accounting.
2. After reading your model I had difficulty identifying the role of the community. If a community college is to serve the needs of the community then there must be significant interaction among the various elements of the community.

The community interaction must not be superficial, but must play an integral part in the development and ongoing operation of the community college.

I will be out of town for the next two weeks. If you care to discuss my comments at greater length please feel free to contact me at a later date.

Sincerely,

Robert F. Rinkus  
 Vice President Administration and Finance

#### BOARD OF TRUSTEES

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# SOUTHWESTERN MICHIGAN COLLEGE

58900 Cherry Grove Road  
Dowagiac, Michigan 49047  
(616) 782-5113 • (616) 683-5780  
1-800-456-8675 • FAX 782-8414

243

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*Looking Back with Pride... Looking Ahead with Commitment*

---

March 20, 1992

Mr. Thaddeus Gaban  
550 Maplewood Court  
Apartment H-67  
Berrien Springs, Michigan 49103

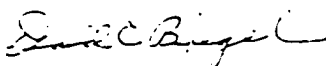
Dear Mr. Gaban:

Thank you for sending dissertation Chapter V, "A Proposed Philosophy for Community Colleges in Malaysia," for my review and opinion. As a community college President, it is particularly exciting to see how a doctoral candidate would envision a community college in another country such as your homeland.

I have reviewed your proposal and find it solid. Your four recommendations seem clear and well defined. Objectives, proposed organization, and planning seem to the point. If I have one concern, it is time frame. Malaysia's goal of being a fully developed or industrialized country by the year 2020 is understandable and laudable. Still, your model is ambitious and comprehensive. While I support your idealism, it will take difficult work to accomplish your plan in 28 years. As you look to the future, remain realistic and see the importance of the task you propose.

Again, your philosophy and model for a community college in Malaysia are excellent and it was a high compliment to be selected as a member of your review panel. Best wishes for your graduate work and for the future of community colleges in Malaysia.

Sincerely,



David C. Briegel  
President

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1755 East Napier Avenue  
 Benton Harbor, MI 49022-1890  
 (616) 927-3571

Office of the President

April 6, 1992

Mr. B. Eudius Gaban  
 550 Maplewood Ct.  
 Apt. H-67  
 Berrien Springs, MI 49103

Dear Mr. Gaban:

Thank you for the opportunity to review your proposal, delineating a proposed model for the organization, administration, and programs for community colleges in Malaysia. I regret that my comments have not been as timely as you may have needed; nonetheless, I hope you will find them helpful and pertinent to your final dissertation.

In general, the proposal was well presented and carefully documented. Indeed, I believe you have the basis for a model that could be adopted to Malaysia's need for a community college system. I would like to encourage you, however, to review some of the more recent literature surrounding the American community college movement. You need, especially, to read Building Communities, a publication prepared by the American Association of Community and Junior Colleges, discussing how community colleges need to relate to the external community they serve and how to strengthen and develop internal resources to serve these broader constituencies. In light of your stated mission to provide the resources that would bring Malaysia into a completely industrialized community by the year 2020, I think this publication would provide important insight.

Your proposal adheres to the traditional American model developed many years ago. To be sure, it is a model that provides a solid foundation. But new organizational models are developing that provide greater consensus building and a more solid method of determining institutional effectiveness. I will be happy to suggest readings to address these concerns, if you are interested.

In your full proposal you, perhaps, need to flush out the financing and governance issues that will surely need to be in place. I think, too, you will want to show even more succinctly how the community college will interrelate to other established academic institutions in Malaysia. You have established a good foundation for this in your proposal already. I'd like to explore, also, the immediate building needs, but that is, for now, a detail.

*We'll Get You There*



B. Thadius Gaban

April 6, 1992

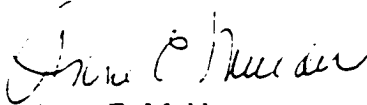
Page 2

Interestingly, the President of the American Chamber of Commerce in Malaysia was recently on our campus. I mentioned your concept, and he was most interested. He would be a good contact, I think, as he knows the needs of industries in Malaysia. His name is Roger Bertelson and his address is:

Roger Bertelson  
President  
AMCHAM  
American Business Council  
Unit 15-01, Level 15  
AMODA, 22 Jalan Imbi,  
55100 Kuala Lumpur.

All in all, you have a good, solid beginning. I would hope the proposal moves from embryo to reality! I believe community colleges are revolutionizing the educational delivery systems in the United States. I am confident that could provide a valuable key to Malaysia's development as well. Let me know how I can assist.

Sincerely,



Anne E. Mulder  
President

hcs



---

# HENRY FORD COMMUNITY COLLEGE

(313) 271-2750

April 6, 1992

Mr. B. Thadius Gaban  
550 Maplewood Ct.  
Apt. H-67  
Berrien Springs, MI 49103

Dear Mr. Gaban:

I was very impressed with your proposal for the development of a community college system for Malaysia. The proposal is comprehensive, well planned and developed.

The design of the program and services provided by the Community College of Malaysia are inclusive of what is determined to be integral segments of a comprehensive community college.

On page ten, you discuss the functions and responsibilities of the board of trustees. It appears that you intend the trustees to "manage" the community college system. It is my understanding that the board of trustees set policies and the management and administration of the institution(s) is delegated to the president of the system. One of the most important responsibilities of the board of trustees is to recruit and select a president who can carry out the policies established by the board of trustees.

In regard to the board of trustees, I assume a plan would be developed for the election of trustees including the length of term, and the number required to serve, and whether trustees would be elected at-large or by specific areas of representation.

In recommendation two, Organization and Administrative Structure, you refer to all administrative positions in the masculine gender. Do you expect to recruit applications for administrative employment employment that are males only?

In the section regarding instruction, you refer to the department of nursing. However, later in the proposal you referred to related health areas. Perhaps you would want to consider naming that department "Allied Health Education or Health Education, or Nursing and Allied Health Education."

---

5101 Evergreen Dearborn, Michigan 48128-1495

- 2 -

In a college that is residential, I assume a comprehensive student activities program would be required and may include such activities as intramural and intermural sports, drama, theatre and forensic, interest clubs, clutural enrichment (lecture, exhibits, presentations), music and dance performance and art to name just a few. Perhaps you could expand your definition of student activities.

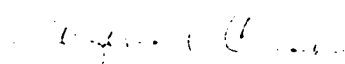
I would asssume that in your development plans a strong liaison would be developed between the community college(s) and the university system. It would seem appropriate that involvement by university educators in development of the instructional program would be imoerative. This would lead to the assurance of the transferability of courses to the universities as well as the acceptance of such programs as two plus two curricula.

Again, I would like to congratulate you on the thoroughness of this proposal and wish you were in the completion of your dessertation requirements.

Please accept my opinions in the spirt given. If they are useful, wonderful. If not, please feel free to disregard them. You, I am sure know what is workable in your country's educational system.

Best wishes for much success in your endeavors!

Sincerely,

  
Margaret A. Crishal, Ed.D.  
Director of Admissions  
and Registration

ab/13Gaban492

APPENDIX I

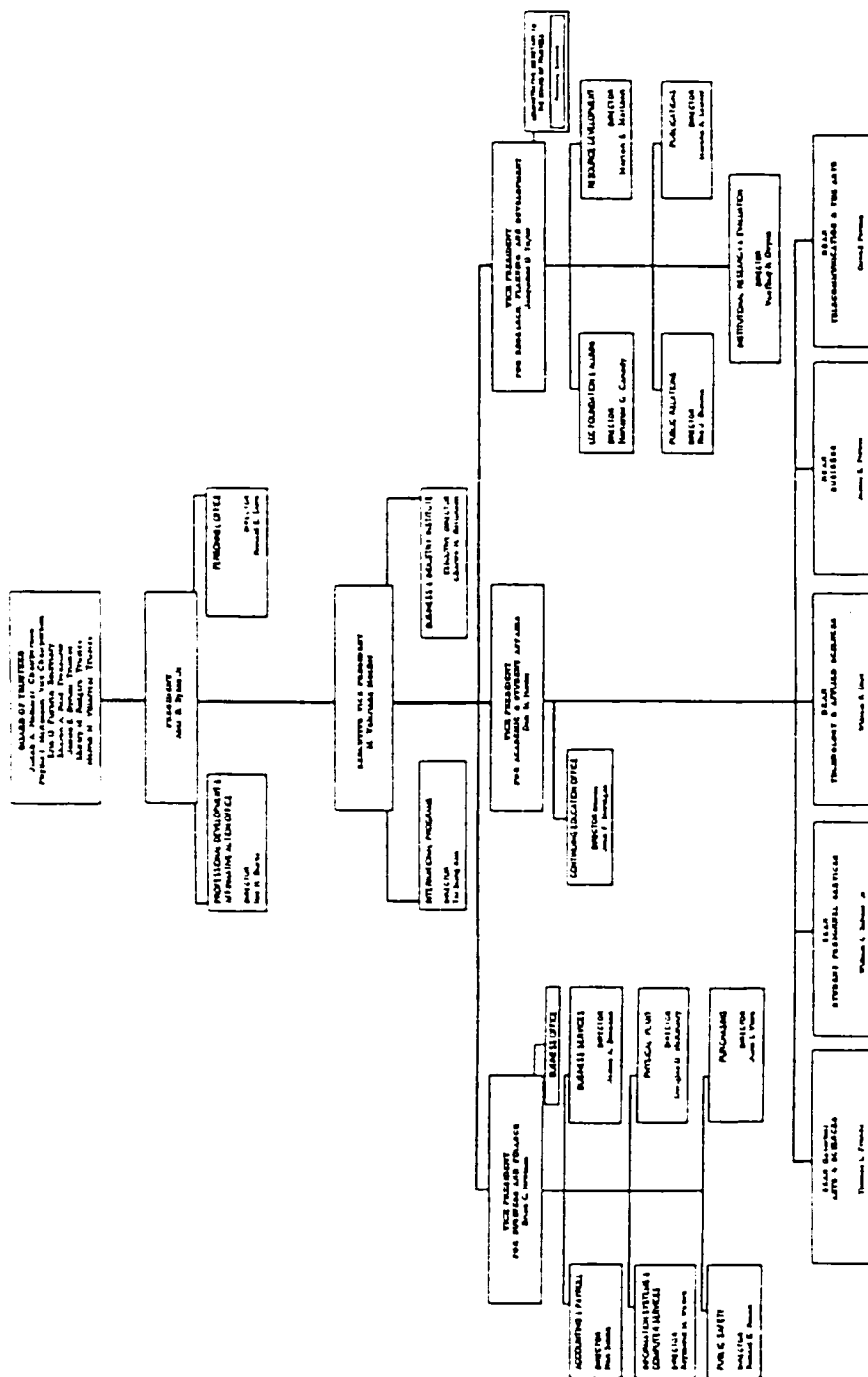
SUGGESTIONS BY PANEL OF EXPERTS  
INCORPORATED IN THE MODEL

Suggestions made by the panel of experts that had been included in the model were as follows:

1. Executive Vice President  
Grand Rapids Community College
  - Inclusion of religious studies under general education
2. Vice President Administration and Finance  
Kellogg Community College
  - Advanced degree (MBA) preferably in accounting for the qualification of the vice president for administration and finance
  - Role of community colleges in building communities
3. President  
Lake Michigan College
  - Role of community colleges in building communities
  - New model of governance in community college
  - Community colleges to serve as feeder institutions to universities
  - Funding of community colleges
4. Director of Admissions  
Henry Ford Community College
  - Provided for both genders in administrative positions
  - Nursing and Allied Health Education
  - Community colleges to serve as feeder institutions to universities

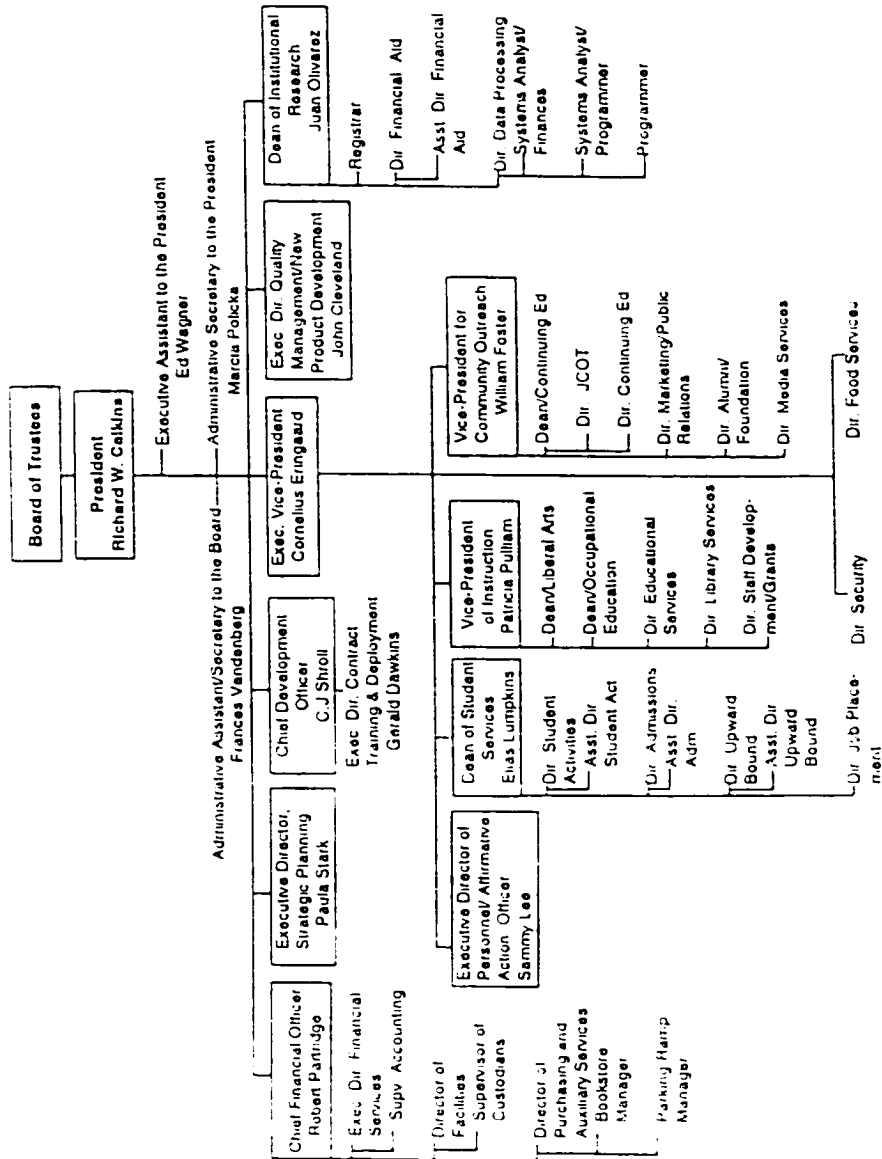
APPENDIX J

ORGANIZATIONAL CHARTS OF  
COMMUNITY COLLEGES VISITED



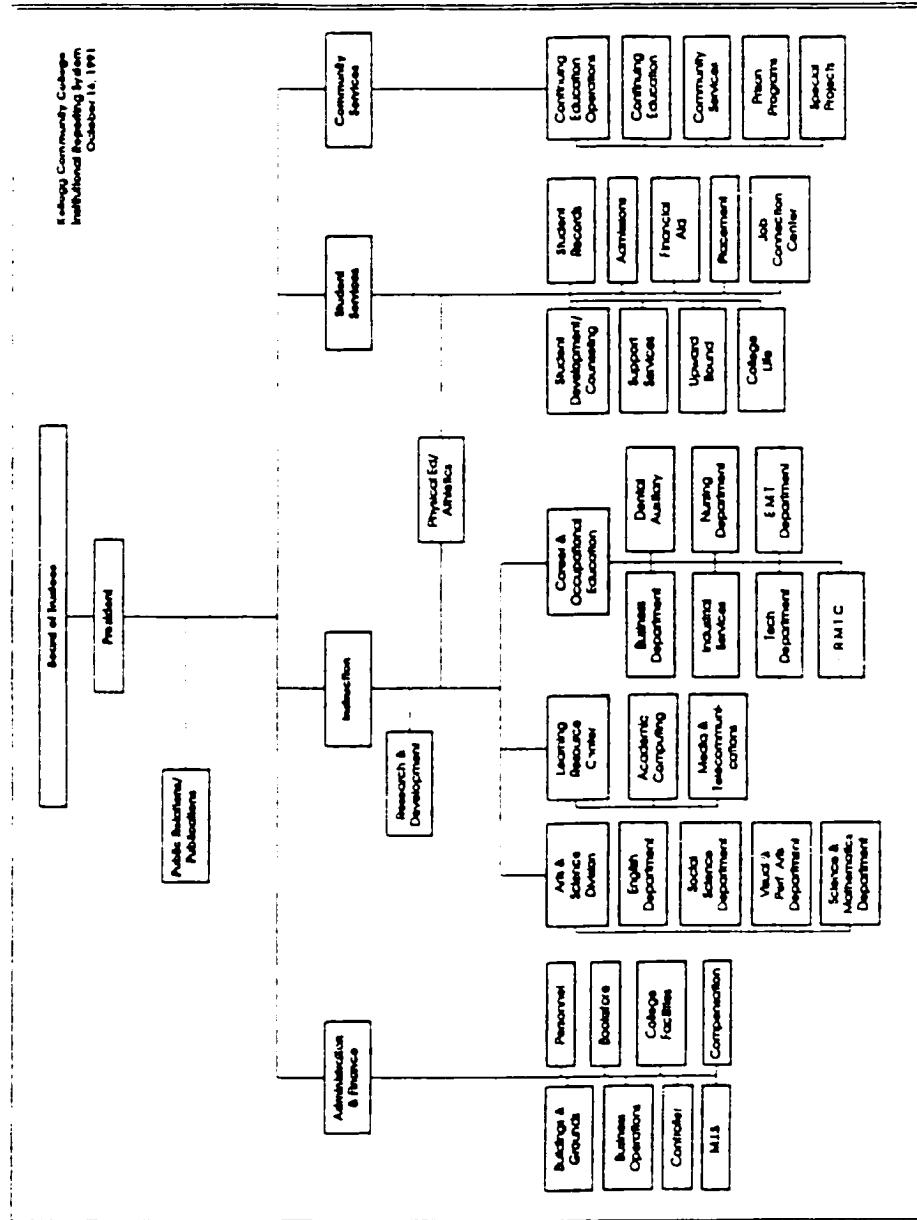
1961 21 January 1961

# Grand Rapids Community College

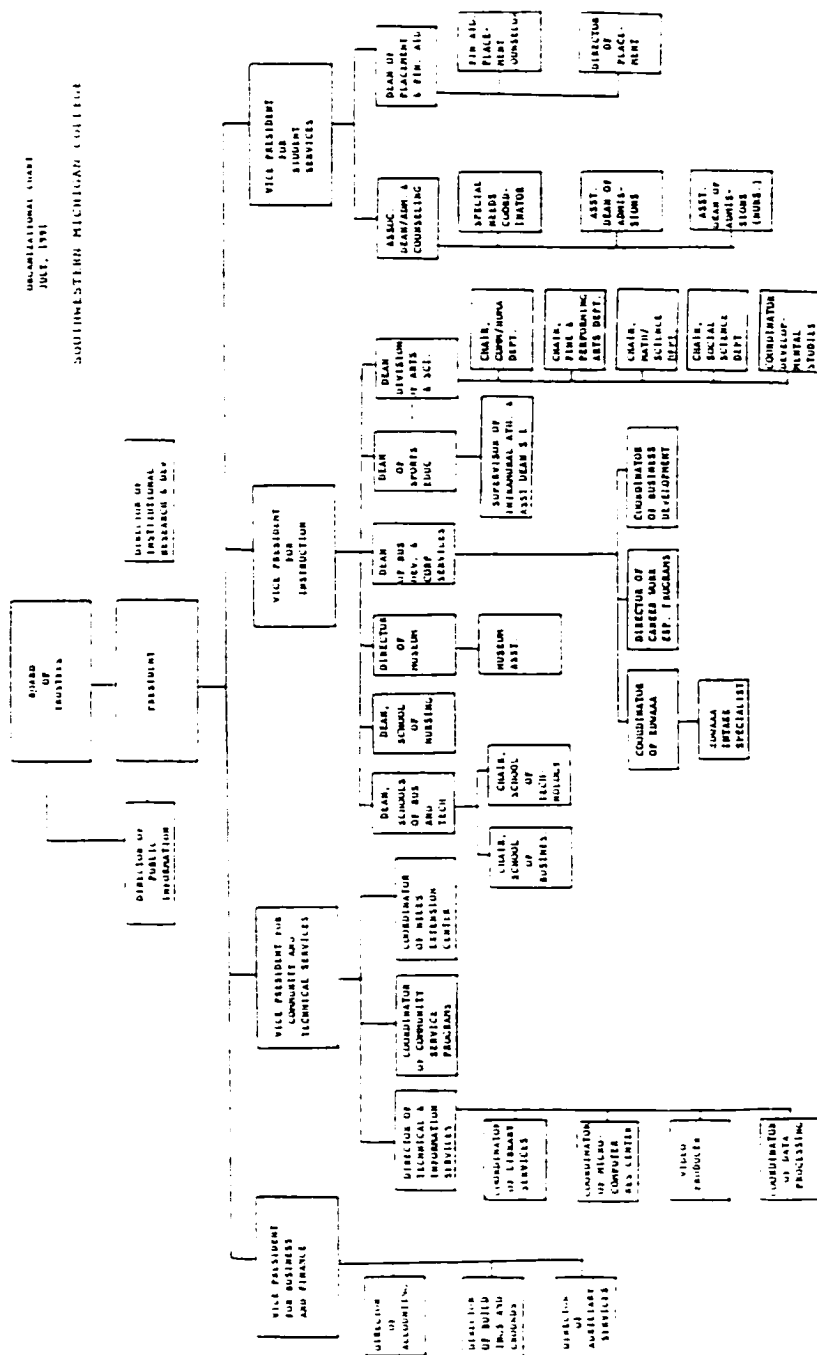


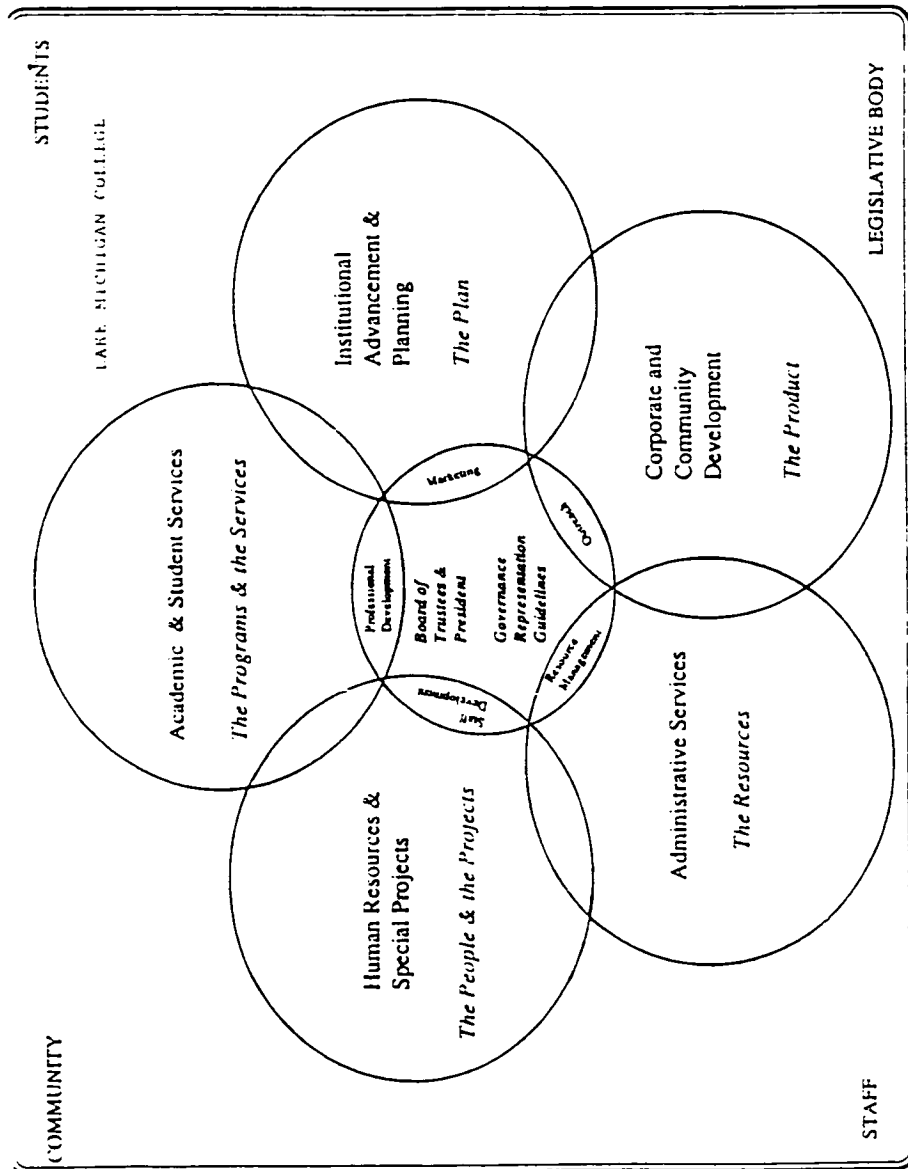
June 3, 1991





20010425TER4 MICROLOGICAL COLLECT



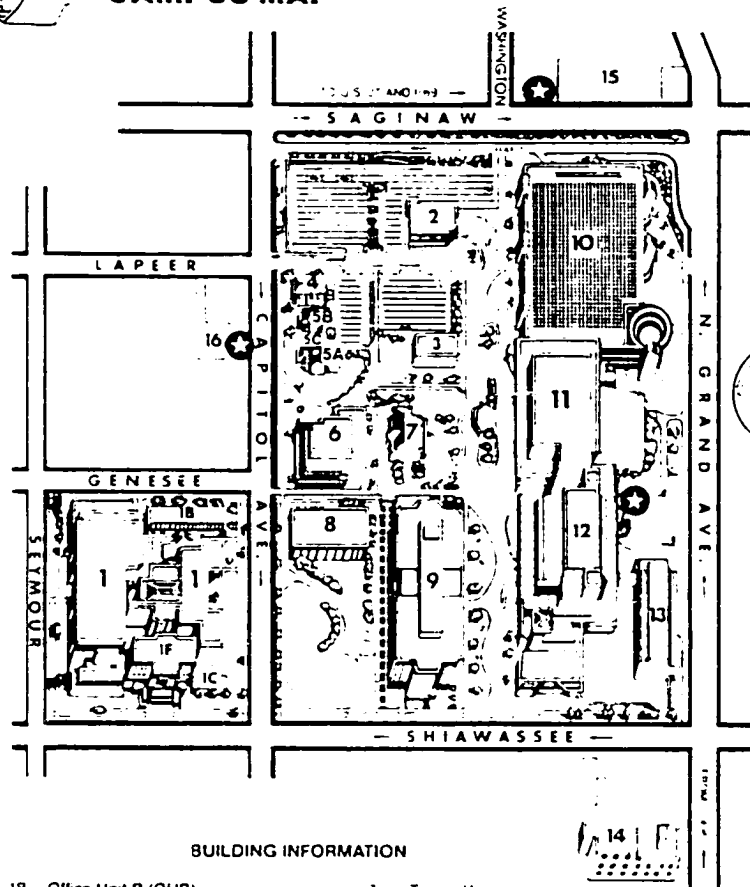


APPENDIX K

CAMPUS LAYOUT OF COMMUNITY COLLEGES VISITED

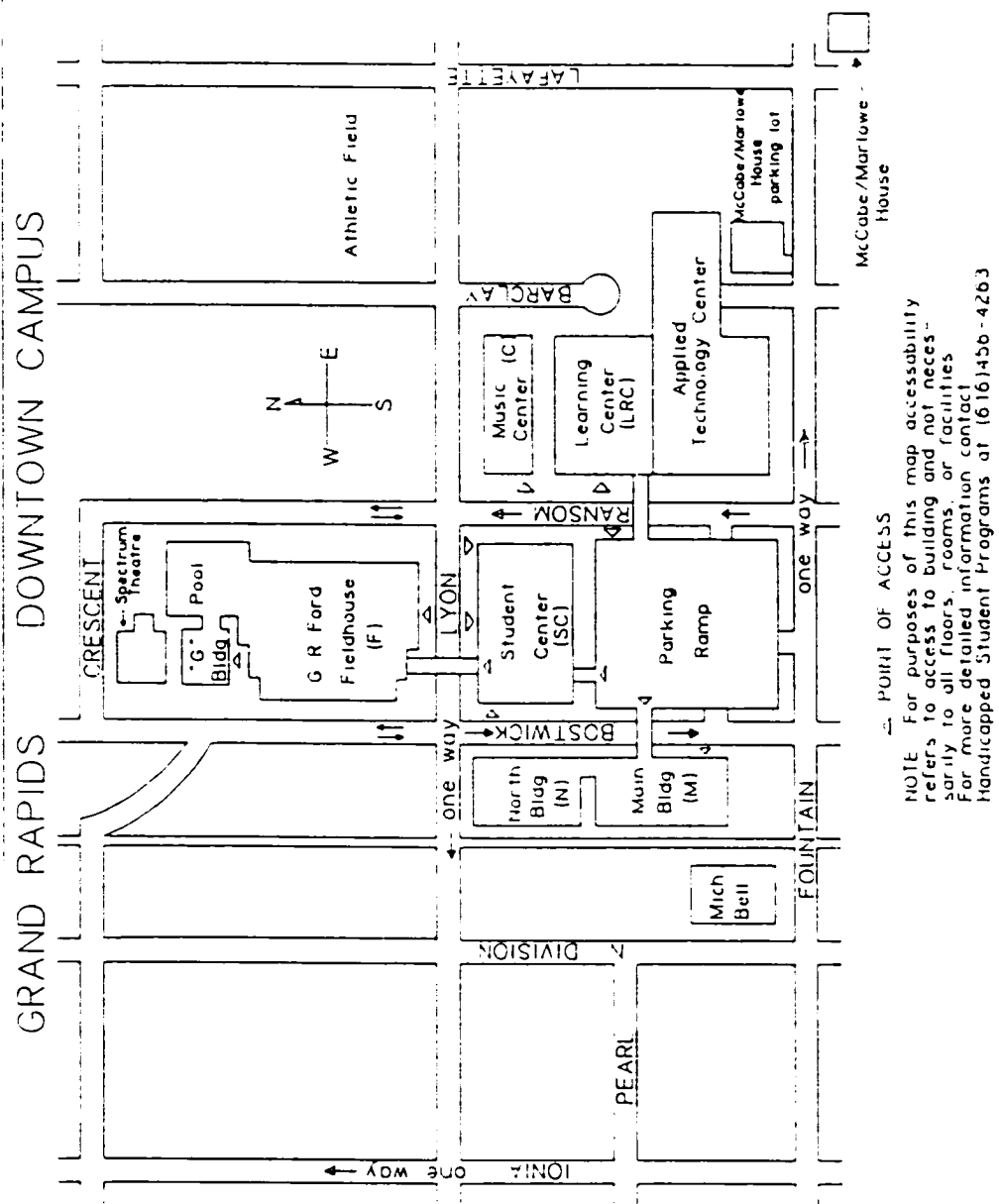


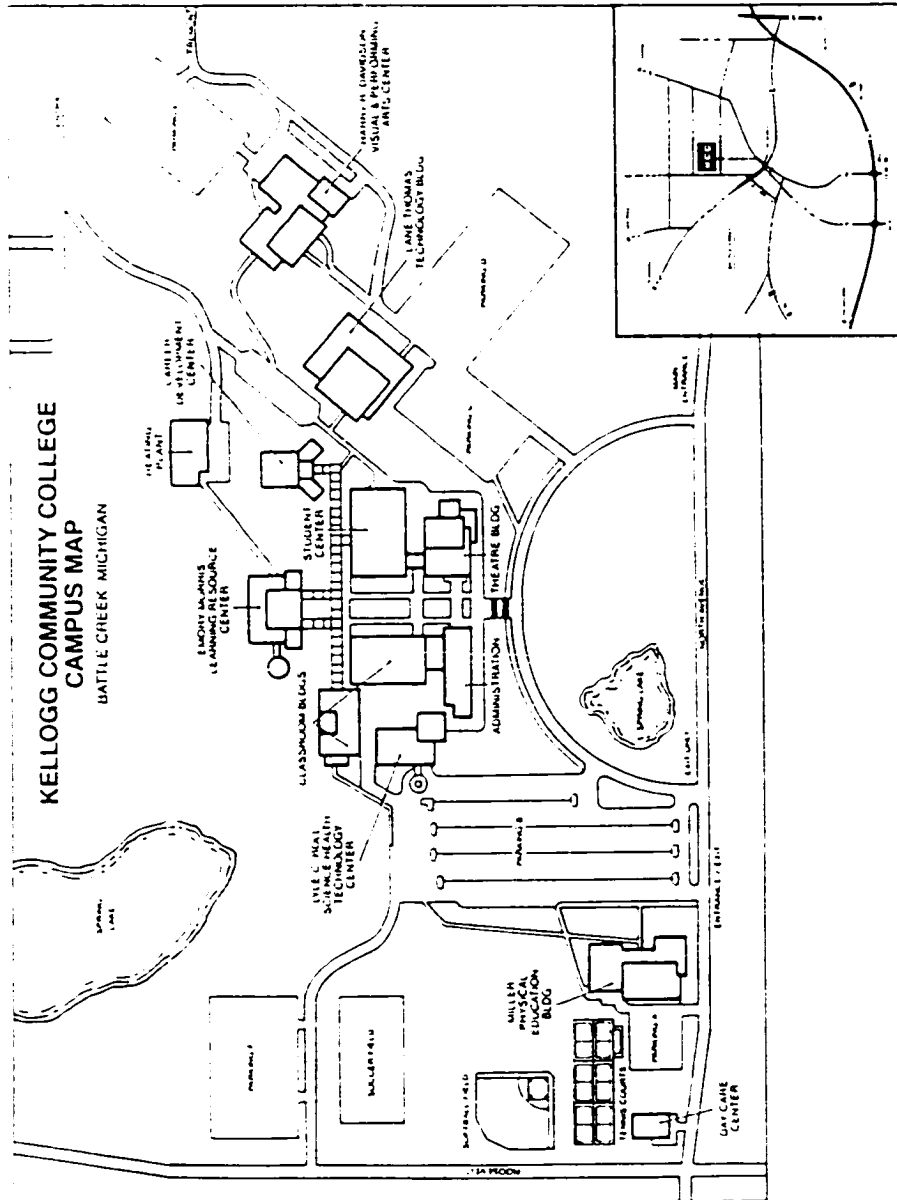
## LANSING COMMUNITY COLLEGE CAMPUS MAP



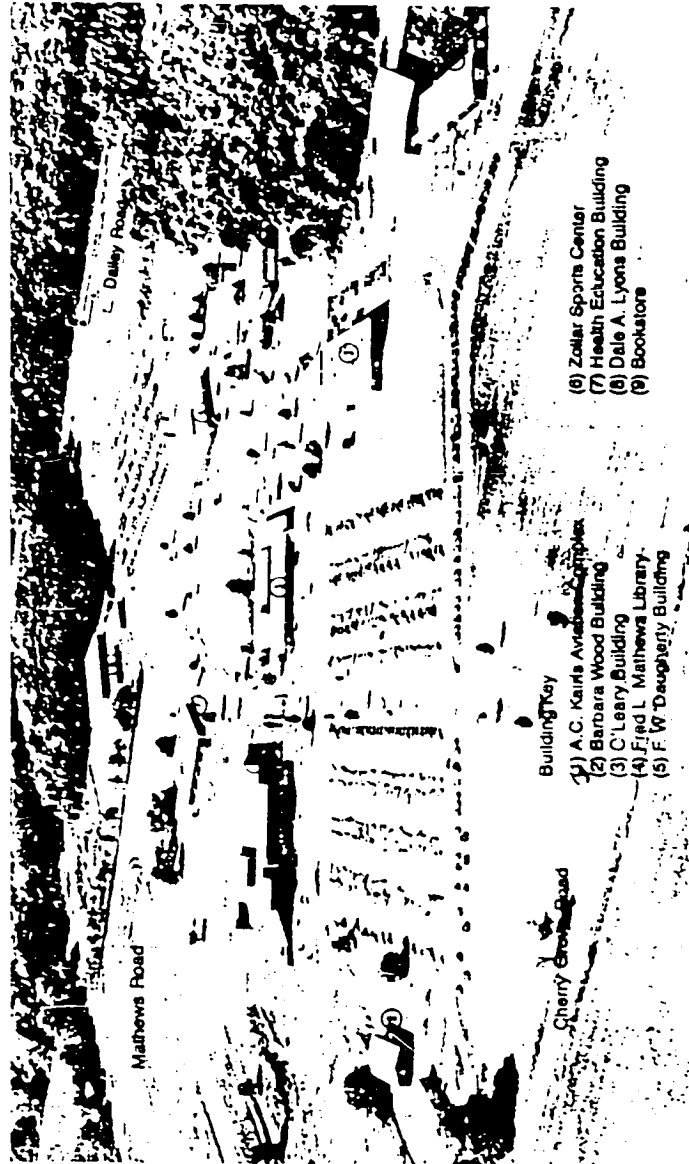
### BUILDING INFORMATION

- |                                      |   |
|--------------------------------------|---|
| 1B Office Unit B (OUB)               | 7 Turner House                                    |
| 1C Office Unit C (OUC)               | 8 Student Personnel Services (SPS)                |
| 1F Office Unit F (OUF)               | 9 Arts & Sciences (A&S)                           |
| 1 Old Central (OC)                   | 10 Parking Ramp                                   |
| 2 Photography Center (PC)            | 11 Gannon Health Careers/Physical Education (GPE) |
| 3 Administration (ADM)               | 12 Gannon Vocational-Technical (GVT)              |
| 4 North House (NH)                   | 13 Voc-Tech Automotive Center                     |
| 5 Herrmann Conference Center Complex | 14 Academic & Office Facility (AOF)               |
| a. Herrmann Conference Center        | 15 Parking Lot                                    |
| b. Rogers-Carrier House              | 16 Parking Lot                                    |
| c. LCC Board Room                    | ○ Emergency Phone                                 |
| 5 Dart Auditorium (DAT)              |   |

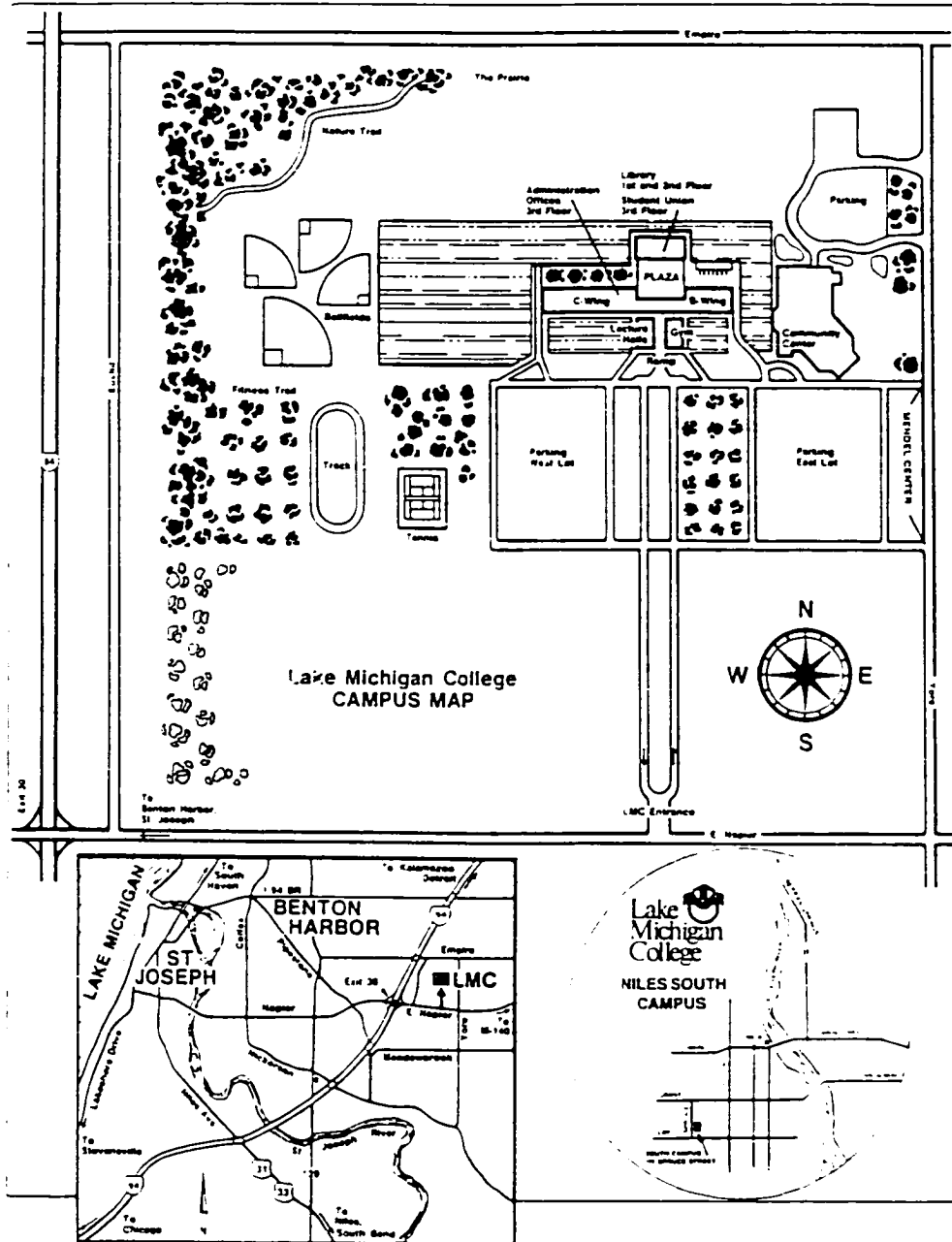




# Southwestern Michigan College Campus Map







APPENDIX L  
STATISTICAL DATA

TABLE 15  
RESPONDENTS' PERCEPTIONS ON THE IMPORTANCE OF EDUCATION  
AND HUMAN RESOURCE DEVELOPMENT IN MALAYSIA

(N = 99)

	ITEM	SD	D (%)	A (%)	SA (%)
1.	Malaysia regards education as a key to development.		4.04	38.38	57.58
2.	Malaysia aims to eradicate poverty through education.		10.10	68.69	21.21
3.	Malaysia believes that human resource development and economic development are closely related.		2.01	64.65	32.33
4.	Every individual should be given the opportunity to reach his/her full potential.		4.04	31.31	64.65
5.	More colleges are needed in Malaysia to cater for the increasing number of secondary school graduates.		1.01	34.34	64.65
6.	Malaysia's growing industrialization demands more college educated workers.		4.04	33.53	62.63
7.	Malaysia needs community colleges to help enhance its efforts of meeting the growing demand for skilled manpower.		1.06	49.49	49.49

(SD=Strongly Disagree; D=Disagree; A=Agree; SA=Strongly Agree)

\* Note: There were no responses under strongly disagree (SD).

TABLE 16

COMPARISON ON THE PERCEPTIONS OF SELECTED MALAYSIAN EDUCATORS,  
POLITICIANS, AND BUSINESSMEN ON THE IMPORTANCE OF EDUCATION  
AND HUMAN RESOURCE DEVELOPMENT IN MALAYSIA

ITEM	Educators (%)					Politician (%)					Businessmen (%)				
	N	SD	D	A	SA	N	SD	D	A	SA	N	SD	D	A	SA
1 Malaysia regards education as a key to development.	44	0	2.27	38.64	59.09	30	0	10.00	36.67	53.33	25	0	0	40	60
2 Malaysia aims to eradicate poverty through education.	44	0	9.09	65.91	25.00	30	0	10.00	66.67	23.33	25	0	12	76	12
3 Malaysia believes that human resources development and economic development are closely related.	44	0	2.27	65.91	31.82	30	0	3.33	60.00	36.67	25	0	0	68	32
4 Every individual should be given the opportunity to reach his/her full potential.	44	0	4.55	25.00	70.45	30	0	6.67	43.33	50.00	25	0	0	28	72
5 More colleges are needed in Malaysia to cater for the increasing number of secondary school graduates.	44	0	2.27	31.82	65.91	30	0	0.00	33.33	66.67	25	0	0	40	60
6 Malaysia's growing industrialization demands more college educated workers.	44	0	6.82	14.09	59.09	30	0	0.00	23.33	76.67	25	0	4	44	52
7 Malaysia needs community colleges to help enhance its efforts of meeting the growing demand for skilled manpower.	44	0	2.27	61.36	36.36	30	0	0.00	36.67	63.33	25	0	0	44	56

Note: N = Number of respondents    SD = Strongly Disagree    D = Disagree  
A = Agree                                SA = Strongly Agree

TABLE 17  
RESPONDENT'S PERCEPTIONS ON THE USEFULNESS OF  
COMMUNITY COLLEGES FOR MALAYSIA

(N=99)

	ITEM	SD	D(%)	A(%)	SA(%)
8.	Community colleges for Malaysia are useful because they:		3.06	54.08	42.86
	1. Offer educational opportunities to disadvantaged secondary school graduates.				
	2. Provide occupational skills in semi-professional fields.		2.02	66.67	31.31
	3. Serve as stepping stones for motivated students to continue their education in universities.		8.08	59.60	32.32
	4. Meet the needs for skilled manpower in business, industry and other professions.		1.01	71.72	27.27
	5. Cater for the educational needs of secondary school graduates.		4.08	67.35	28.57
	6. Meet the educational needs of working adults to attain specific qualifications for career advancement and change.		6.06	57.58	36.36
	7. Contribute to the intellectual and cultural activities of their communities.		13.13	58.39	28.28
	8. Prepare students to assume responsible roles as citizens.		12.12	63.64	24.24

(SD=Strongly Disagree; D=Disagree; A=Agree; SA=Strongly Agree)

TABLE 18

COMPARISON ON THE PERCEPTIONS OF SELECTED MALAYSIAN EDUCATORS,  
POLITICIANS, AND BUSINESSMEN ON THE USEFULNESS  
OF COMMUNITY COLLEGES FOR MALAYSIA

OBS	ITEM	Educators (%)					Politician (%)					Businessmen (%)				
		N	SD	D	A	SA	N	SD	D	A	SA	N	SD	D	A	SA
8	Community Colleges for Malaysia are useful because they:															
8.1	Offer educational opportunities to disadvantaged secondary school graduates.	43	0	4.65	58.14	37.21	30	0	3.33	46.67	50.00	25	0	0	56	44
8.2	Provide occupational skills in semi-professional fields.	44	0	4.55	68.18	27.27	30	0	0.00	73.33	26.67	25	0	0	56	44
8.3	Serve as stepping stones for motivated students to continue their education in universities.	44	0	9.09	61.36	29.55	30	0	6.67	60.00	33.33	25	0	8	56	36
8.4	Meet the needs for skilled manpower in business, industry and other profession.	44	0	2.27	70.45	27.27	30	0	0.00	73.33	26.67	25	0	0	72	28
8.5	Cater for the educational needs of secondary school graduates.	44	0	2.27	65.91	31.82	29	0	6.90	62.07	31.03	25	0	4	76	20
8.6	Meet the educational needs of working adults to attain specific qualifications for career advancement and change.	44	0	4.55	50.00	45.45	30	0	6.67	60.00	33.33	25	0	8	68	24
8.7	Contribute to the intellectual and cultural activities of their communities.	44	0	13.64	47.73	38.64	30	0	13.33	56.67	30.00	25	0	12	80	8
8.8	Prepare students to assume responsible roles as citizens.	44	0	13.64	63.64	22.73	30	0	13.33	53.33	33.33	25	0	8	76	16

Note: N = Number of respondents    SD = Strongly Disagree    D = Disagree  
A = Agree                                SA = Strongly Agree

TABLE 19

RESPONDENTS' PERCEPTIONS ON THE NEED FOR THE TRANSFER  
PROGRAMS IN THE PROFESSIONAL FIELDS LISTED IN ITEMS  
1 TO 21 FOR COMMUNITY COLLEGES IN MALAYSIA

(N=99)

ITEM		Low Need (%)	Average Need (%)	High Need (%)
1.	Accounting	4.04	52.53	43.43
2.	Advertising	25.25	54.55	20.20
3.	Agriculture	7.07	31.31	61.62
4.	Architecture	9.09	50.51	40.40
5.	Art	39.80	51.02	9.18
6.	Aviation	29.29	40.40	30.30
7.	Biology	19.19	55.56	25.25
8.	Business Administration	6.06	49.49	44.44
9.	Chemistry	15.31	55.10	29.59
10.	Communications	5.05	40.40	54.55
11.	Computer Information Systems	5.05	20.20	74.75
12.	Computer Science	5.05	24.24	70.71
13.	Computer Systems Engineering	6.06	24.24	69.70
14.	Criminal Justice	19.19	46.46	34.34
15.	Dietetics	13.13	55.56	31.31
16.	Economics	3.03	59.60	37.37
17.	Engineering Graphics	22.22	63.64	14.14
18.	English	26.26	42.42	31.31
19.	Fashion Merchandising	20.20	31.31	48.48
20.	Finance	2.02	41.41	56.57
21.	Forestry	12.12	38.38	49.49

TABLE 20  
COMPARISON ON THE PERCEPTIONS OF SELECTED MALAYSIAN EDUCATORS,  
POLITICIANS, AND BUSINESSMEN ON THE NEED FOR THE  
TRANSFER PROGRAMS IN THE PROFESSIONAL FIELDS  
LISTED IN ITEMS 1 TO 21 FOR COMMUNITY  
COLLEGES IN MALAYSIA

ITEM	Educators (%)					Politicians (%)					Businessmen (%)				
	N	L	A	H	N	L	A	H	N	L	A	H	N	L	A
1 Accounting	44	4.55	47.73	47.73	30	3.33	60.00	36.67	25	4.00	52.00	44.00	25	4.00	52.00
2 Advertising	44	29.55	43.18	27.27	30	20.00	73.33	6.67	25	24.00	52.00	24.00	25	24.00	52.00
3 Agriculture	44	6.82	29.55	63.64	30	3.33	16.67	80.00	25	12.00	52.00	36.00	25	12.00	52.00
4 Architecture	44	4.55	52.27	43.18	30	10.00	53.33	36.67	25	16.00	44.00	40.00	25	16.00	44.00
5 Art	43	37.21	51.16	11.63	30	33.33	53.33	13.33	25	52.00	48.00	0.00	25	52.00	48.00
6 Aviation	44	29.55	43.18	27.27	30	26.67	40.00	33.33	25	32.00	36.00	32.00	25	32.00	36.00
7 Biology	44	22.73	45.45	31.82	30	16.67	56.67	26.67	25	16.00	72.00	12.00	25	16.00	72.00
8 Business Administration	44	2.27	50.00	47.73	30	13.33	60.00	26.67	25	4.00	36.00	60.00	25	4.00	36.00
9 Chemistry	43	16.28	44.19	39.53	30	16.67	63.33	20.00	25	12.00	64.00	24.00	25	12.00	64.00
10 Communications	44	6.82	38.64	54.55	30	3.33	46.67	50.00	25	4.00	36.00	60.00	25	4.00	36.00
11 Computer Information Systems	44	2.27	20.45	77.27	30	13.33	30.00	56.67	25	0.00	8.00	92.00	25	0.00	8.00
12 Computer Science	44	4.55	25.00	70.45	30	10.00	33.33	56.67	25	0.00	12.00	88.00	25	0.00	12.00
13 Computer Systems Engineering	44	4.55	25.00	70.45	30	10.00	36.67	53.33	25	4.00	8.00	98.00	25	4.00	8.00
14 Criminal Justice	44	18.18	47.73	34.09	30	16.67	43.33	40.00	25	24.00	48.00	28.00	25	24.00	48.00
15 Dietetics	44	11.36	43.18	45.45	30	16.67	56.67	26.67	25	12.00	76.00	12.00	25	12.00	76.00
16 Economics	44	4.55	59.09	36.36	30	0.00	63.33	36.67	25	4.00	56.00	40.00	25	4.00	56.00
17 Engineering Graphics	44	31.82	61.36	6.82	30	13.33	63.33	23.33	25	16.00	68.00	16.00	25	16.00	68.00
18 English	44	34.09	50.00	15.91	30	26.67	33.33	40.00	25	12.00	40.00	48.00	25	12.00	40.00
19 Fashion Merchandising	44	9.09	27.27	63.64	30	26.67	36.67	36.67	25	32.00	32.00	36.00	25	32.00	32.00
20 Finance	44	2.27	36.36	61.36	30	0.00	46.67	53.33	25	4.00	44.00	52.00	25	4.00	44.00
21 Forestry	44	11.36	36.36	52.27	30	6.67	26.67	66.67	25	20.00	56.00	24.00	25	20.00	56.00

Note: N = Number of Respondents  
L = Low Need  
A = Average Need  
H = High Need



TABLE 21

RESPONDENTS' PERCEPTIONS ON THE NEED FOR THE TRANSFER  
PROGRAMS IN THE PROFESSIONAL FIELDS LISTED IN ITEMS  
22 TO 42 FOR COMMUNITY COLLEGES IN MALAYSIA

(N=99)

ITEM		Low Need (%)	Average Need (%)	High Need (%)
22.	History	44.44	46.46	9.09
23.	Industrial Design	11.11	57.58	31.31
24.	Industrial Education	9.09	46.46	44.44
25.	Interior Design--Liberal Arts	42.9	54.55	3.03
26.	Journalism	17.17	53.54	29.29
27.	Librarianship	24.24	60.61	15.15
28.	Literature	41.41	51.52	7.07
29.	Management	5.05	36.36	58.59
30.	Manufacturing Administration	8.08	32.37	54.55
31.	Marketing	7.07	41.41	51.52
32.	Mathematics	15.15	48.48	36.36
33.	Medical Technology	8.08	23.23	68.69
34.	Nursing	7.07	35.35	57.58
35.	Paper Science/Engineering	15.15	48.48	36.36
36.	Pharmacy	11.11	48.49	39.39
37.	Physical Education	30.30	57.58	12.12
38.	Physical Therapy	22.22	55.56	22.22
39.	Physician's Assistant	28.28	49.49	22.22
40.	Physics	29.7	44.05	26.19
41.	Political Science	33.33	44.44	22.22
42.	Pre-Engineering	9.09	56.57	34.34

3 -

TABLE 22  
COMPARISON ON THE PERCEPTIONS OF SELECTED MALAYSIAN EDUCATORS,  
POLITICIANS, AND BUSINESSMEN ON THE NEED FOR THE  
TRANSFER PROGRAMS IN THE PROFESSIONAL FIELDS  
LISTED IN ITEMS 22 TO 42 FOR COMMUNITY  
COLLEGES IN MALAYSIA

ITEM	Educators (%)				Politicians (%)				Businessmen (%)			
	N	L	A	H	N	L	A	H	N	L	A	H
22 History	44	45.45	45.45	9.09	30	40.00	43.33	16.67	25	48.00	52.00	0.00
23 Industrial Design	44	15.91	56.82	27.27	30	10.00	53.33	36.67	25	4.00	64.00	32.00
24 Industrial Education	44	6.82	47.73	45.45	30	13.33	33.33	53.33	25	8.00	60.00	32.00
25 Interior Design - Liberal Arts	44	47.73	47.73	4.55	30	33.33	66.67	0.00	25	44.00	52.00	4.00
26 Journalism	44	20.45	47.73	31.82	30	10.00	63.33	26.67	25	20.00	52.00	28.00
27 Librarianship	44	18.18	63.64	18.18	30	26.67	60.00	13.33	25	32.00	56.00	12.00
28 Literature	44	40.91	52.27	6.82	30	33.33	60.00	6.67	25	52.00	40.00	8.00
29 Management	44	4.55	34.09	61.36	30	10.00	40.00	50.00	25	0.00	36.00	64.00
30 Manufacturing Administration	44	11.36	38.64	50.00	30	10.00	40.00	50.00	25	0.00	32.00	68.00
31 Marketing	44	11.36	43.18	45.45	30	6.67	30.00	63.33	25	0.00	52.00	48.00
32 Medical Technology	44	13.64	43.18	43.18	30	16.67	53.33	30.00	25	8.00	64.00	28.00
33 Medical Technology	44	6.82	22.73	70.45	30	13.33	20.00	66.67	25	4.00	28.00	68.00
34 Nursing	44	6.82	22.73	70.45	30	10.00	46.67	43.33	25	4.00	44.00	52.00
35 Paper Science/Engineering	44	13.64	43.18	43.18	30	16.67	50.00	33.33	25	16.00	56.00	28.00
36 Pharmacy	44	9.09	40.91	50.00	30	16.67	46.67	36.67	25	8.00	68.00	24.00
37 Physical Education	44	29.55	56.82	13.64	30	33.33	56.67	10.00	25	28.00	60.00	12.00
38 Physical Therapy	44	22.73	50.00	27.27	30	23.33	60.00	16.67	25	20.00	60.00	20.00
39 Physicist's Assistant	44	22.73	52.27	25.00	30	40.00	33.33	26.67	25	24.00	64.00	12.00
40 Physics	40	30.00	42.50	27.50	27	33.33	44.44	22.22	17	23.53	47.06	29.41
41 Political Science	44	38.64	34.09	27.27	30	26.67	50.00	23.33	25	32.00	56.00	12.00
42 Pre-Engineering	44	11.36	59.09	29.55	30	13.33	60.00	26.67	25	0.00	48.00	52.00

Note: N = Number of Respondents  
L = Low Need  
A = Average Need  
H = High Need

TABLE 23

RESPONDENTS' PERCEPTIONS ON THE NEED FOR THE TRANSFER  
PROGRAMS IN THE PROFESSIONAL FIELDS IN ITEMS  
43 TO 64 FOR COMMUNITY COLLEGES IN MALAYSIA

(N=99)

ITEM		Low Need (%)	Average Need(%)	High Need(%)
43.	Pre-Engineering-Electrical	9.09	56.57	34.34
44.	Pre-Engineering-Industrial	9.09	50.51	40.40
45.	Pre-Engineering-Mechanical	11.11	52.53	36.36
46.	Pre-Law	21.21	58.59	20.20
47.	Pre-Science	20.20	58.59	21.21
48.	Pre-Science-Pre-Dentistry	13.13	46.46	40.40
49.	Pre-Science-Pre-Medicine	11.11	38.38	50.51
50.	Pre-Science-Pre-Optometry	19.19	47.47	33.33
51.	Pre-Science-Pre-Veterinary	15.15	57.58	27.27
52.	Primary Education	10.10	43.43	46.46
53.	Printing Management/Marketing	18.18	62.63	19.19
54.	Psychology	27.27	43.43	29.29
55.	Public Administration	13.13	59.60	27.27
56.	Public Relations	9.09	62.63	28.28
57.	Real Estate	17.17	58.59	24.24
58.	Recreation	28.28	50.51	21.21
59.	Secondary Education	9.09	41.41	49.49
60.	Social Work	13.13	56.57	30.30
61.	Sociology	18.18	60.61	21.21
62.	Surveying	13.13	56.57	30.30
63.	Travel/Tourism	8.08	47.47	44.44
64.	Wild-life Management	18.18	44.44	37.37

TABLE 24  
COMPARISON ON THE PERCEPTIONS OF SELECTED MALAYSIAN EDUCATORS,  
POLITICIANS, AND BUSINESSMEN ON THE NEED FOR  
THE TRANSFER PROGRAMS IN THE PROFESSIONAL  
FIELDS LISTED IN ITEMS 43 TO 64 FOR  
COMMUNITY COLLEGES IN MALAYSIA

ITEM	Educators (%)				Politicians (%)				Businessmen (%)			
	N	L	A	H	N	L	A	H	N	L	A	H
43 Pre-Engineering-Electrical	44	11.36	54.55	34.09	30	13.33	66.67	20.00	25	0.00	48.00	52.00
44 Pre-Engineering-Industrial	44	11.36	47.73	40.91	30	13.33	60.00	26.67	25	0.00	44.00	56.00
45 Pre-Engineering-Mechanical	44	13.64	50.00	36.36	30	13.33	63.33	23.33	25	4.00	44.00	52.00
46 Pre-Law	44	22.73	54.55	22.73	30	23.33	63.33	13.33	25	16.00	60.00	24.00
47 Pre-Science	44	27.27	59.09	13.64	30	16.67	56.67	26.67	25	12.00	60.00	28.00
48 Pre-Science-Pre-Dentistry	44	11.36	36.36	52.27	30	20.00	50.00	30.00	25	8.00	60.00	32.00
49 Pre-Science-Pre-Medicine	44	11.36	31.82	56.82	30	16.67	40.00	43.33	25	4.00	48.00	48.00
50 Pre-Science-Pre-Optometry	44	18.18	43.18	38.64	30	30.00	46.67	23.33	25	8.00	56.00	36.00
51 Pre-Science-Pre-Veterinary	44	20.45	50.00	29.55	30	13.33	53.33	33.33	25	8.00	76.00	16.00
52 Primary Education	44	13.64	36.36	50.00	30	6.67	46.67	46.67	25	8.00	52.00	40.00
53 Printing Management/Marketing	44	22.73	56.82	20.45	30	20.00	73.33	6.67	25	8.00	60.00	32.00
54 Psychology	44	25.00	38.64	36.36	30	33.33	36.67	30.00	25	24.00	60.00	16.00
55 Public Administration	44	11.36	56.82	31.82	30	13.33	60.00	26.67	25	16.00	64.00	20.00
56 Public Relations	44	11.36	54.55	34.09	30	6.67	66.67	26.67	25	8.00	72.00	20.00
57 Real Estate	44	18.18	52.27	29.55	30	16.67	73.33	10.00	25	16.00	52.00	32.00
58 Recreation	44	25.00	43.18	31.82	30	33.33	50.00	16.67	25	28.00	64.00	8.00
59 Secondary Education	44	6.82	47.73	45.45	30	13.33	23.33	63.33	25	8.00	52.00	40.00
60 Social Work	44	11.36	54.55	34.09	30	16.67	46.67	36.67	25	12.00	72.00	16.00
61 Sociology	44	15.91	59.09	25.00	30	23.33	50.00	26.67	25	16.00	76.00	8.00
62 Surveying	44	13.64	54.55	31.82	30	13.33	43.33	43.33	25	12.00	76.00	12.00
63 Travel/Tourism	44	11.36	45.45	43.18	30	6.67	36.67	56.67	25	4.00	64.00	32.00
64 Wild-life Management	44	18.18	38.64	43.18	30	13.33	40.00	46.67	25	24.00	60.00	16.00

Note: N = Number of Respondents  
L = Low Need  
A = Average Need  
H = High Need

TABLE 25

RESPONDENTS' PERCEPTIONS ON THE NEED FOR THE OCCUPATIONAL  
PROGRAMS FOR COMMUNITY COLLEGES IN MALAYSIA

(N=99)

ITEM		Low Need (%)	Average Need (%)	High Need (%)
1.	Accounting	5.05	46.46	48.48
2.	Agriculture Business	9.09	46.46	44.44
3.	Automotive Body and Fender	20.20	50.51	29.29
4.	Automotive Mechanics (theory)	21.21	50.51	28.28
5.	Automotive Technician	15.15	43.43	41.41
6.	Banking and Finance	4.04	38.38	57.58
7.	Business, Marketing	2.02	42.42	55.56
8.	Cosmetology	36.36	52.53	11.11
9.	Criminal Justice, Corrections	21.21	52.53	26.26
10.	Criminal Justice, Law Enforcement	18.18	51.52	30.30
11.	Data Processing (computer)	10.10	25.25	64.65
12.	Drafting Technician	11.11	56.57	32.32
13.	Early Childhood Education	11.11	43.43	45.45
14.	Electronics Technology	7.07	35.35	57.58
15.	Fashion Merchandising	37.37	47.47	15.15
16.	Fire Technology	22.45	57.14	20.41
17.	Home Economics	22.22	65.66	12.12
18.	Machine Tool Technician	11.11	54.55	34.34
19.	Professional Photography	40.40	48.48	11.11
20.	Real Estate	18.18	62.63	19.19
21.	Television Servicing	12.12	62.63	25.25
22.	Water and Waste Water Technology	8.08	36.36	55.56
23.	Welding Technician	15.15	54.55	30.30

TABLE 26

COMPARISON ON THE PERCEPTIONS OF SELECTED MALAYSIAN EDUCATORS,  
POLITICIANS, AND BUSINESSMEN ON THE NEED FOR  
THE OCCUPATIONAL PROGRAMS FOR COMMUNITY  
COLLEGES IN MALAYSIA

ITEM	Educators (%)				Politicians (%)				Businessmen (%)			
	N1	L1	A1	H1	N2	L2	A2	H2	N3	L3	A3	H3
1 Accounting	44	2.27	38.64	59.09	30	10.00	63.33	26.67	25	4	40	56
2 Agriculture Business	44	6.82	47.73	45.45	30	6.67	33.33	60.00	25	16	60	24
3 Automotive Body and Fender	44	22.73	47.73	29.55	30	26.67	53.33	20.00	25	8	52	40
4 Automotive Mechanics (theory)	44	22.73	50.00	27.27	30	30.00	50.00	20.00	25	8	52	40
5 Automotive Technician	44	15.91	40.91	43.18	30	23.33	50.00	26.67	25	4	40	56
6 Banking and Finance	44	2.27	38.64	59.09	30	6.67	36.67	56.67	25	4	40	56
7 Business, Marketing	44	2.27	40.91	56.82	30	3.33	46.67	50.00	25	0	40	60
8 Cosmetology	44	29.55	52.27	18.18	30	53.33	43.33	3.33	25	28	64	8
9 Criminal Justice, Corrections	44	18.18	50.00	31.82	30	23.33	46.67	30.00	25	24	64	12
10 Criminal Justice, Law Enforcement	44	15.91	50.00	34.09	30	16.67	43.33	40.00	25	24	64	12
11 Data Processing	44	9.09	25.00	65.91	30	20.00	26.67	53.33	25	0	24	76
12 Drafting Technician	44	11.36	54.55	34.09	30	16.67	56.67	26.67	25	4	60	36
13 Early Childhood Education	44	9.09	36.36	54.55	30	10.00	46.67	43.33	25	16	52	32
14 Electronics Technology	44	2.27	31.82	65.91	30	20.00	46.67	33.33	25	0	28	72
15 Fashion Merchandising	44	36.36	52.27	11.36	30	50.00	40.00	10.00	25	24	48	28
16 Fire Technology	43	18.60	55.81	25.58	30	33.33	40.00	26.67	25	16	80	4
17 Home Economics	44	22.73	59.09	18.18	30	16.67	73.33	10.00	25	28	68	4
18 Machine Tool Technician	44	9.09	56.82	34.09	30	23.33	53.33	23.33	25	0	52	48
19 Professional Photography	44	34.09	54.55	11.36	30	53.33	36.67	10.00	25	36	52	12
20 Real Estate	44	13.64	68.18	18.18	30	23.33	63.33	13.33	25	20	52	28
21 Television Servicing	44	11.36	52.27	36.36	30	16.67	73.33	10.00	25	8	68	24
22 Water and Waste Water Technology	44	11.36	31.82	56.82	30	6.67	33.33	60.00	25	4	48	48
23 Welding Technician	44	13.64	47.73	38.64	30	26.67	63.33	10.00	25	4	56	40

Note:

N = Number of Respondents

L = Low Need

A = Average Need

H = High Need

## APPENDIX M

### LETTER OF INTRODUCTION FROM SPONSOR

Translation

July 12, 1991

To Whom It May Concern

Dear Sir/Madame,

Research Study

Mr. Boni Thadius Gaban

I wish to certify that Boni Thadius Gaban is presently pursuing a Ph.D program in Educational Administration at Andrews University, Michigan, U.S.A. He is sponsored by the State Government of Sabah, Malaysia.

In meeting the requirements of his program he is required to conduct a research survey connected to his study.

Your kind assistance in this matter will be highly appreciated.

Thank you.

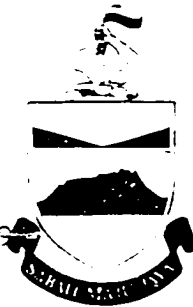


Telefon: 427744

Telegram:

"CHIEFMIN KOTA KINABALU"

Ref: JKM. C.203/20,5298 Bhg.II/(169



JABATAN KETUA MENTERI  
88502 KOTA KINABALU  
SABAH, MALAYSIA

12 Julai 1991

KEPADA YANG BERKINAAAN

Tuan/Puan,

PENYELIDIKAN LUAR  
ENCIK BONI THADIVS GABAN

Dengan hormatnya dimaklumkan bahawa Encik Boni Thadius Gaban adalah pelajar yang sedang mengikuti kursus Ijazah Kedoktoran (Ph.D) dalam program Pentadbiran Pendidikan di Andrews University, Michigan, Amerika Syarikat dibawah tajaan Biasiswa Kerajaan Negeri Sabah.

Sebagai memenuhi syarat keperluan untuk pengijazahan bagi kursus tersebut beliau dikehendaki membuat kajian/penyelidikan dalam bidang yang berkaitan dengan kursus yang diikutinya.

Oleh yang demikian dan demi melicinkan kajian beliau amatlah dihargai jika tuan/puan dapat memberikan segala bantuan dan kerjasama yang perlu kepada beliau.

Sekian, terima kasih.

" BERKHIDMAT UNTUK NEGARA DENGAN BERSIH, CEKAP DAN AMANAH "

Saya yang menurut perintah,

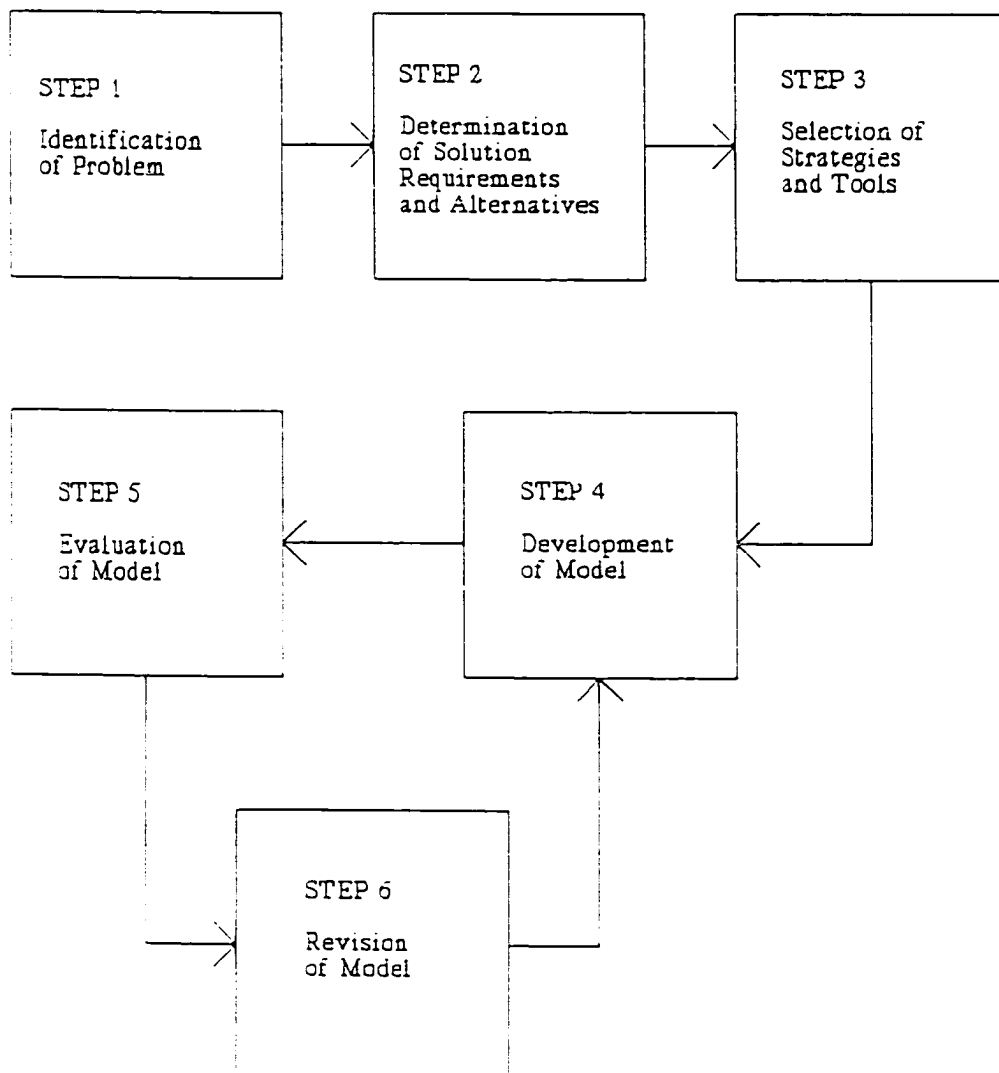
( IGNATIA VALENTINA GILM )  
Bahagian Latihan dan Kerjaya  
b.p. Setiausaha Kerajaan Negeri

XAH/zas

## **APPENDIX N**

### **STEPS IN DEVELOPING A MODEL FOR THE ORGANIZATION, ADMINISTRATION, AND PROGRAMS FOR COMMUNITY COLLEGES IN MALAYSIA**

Steps in Developing A Model for the  
Organization, Administration, and  
Programs for Community Colleges  
in Malaysia



### Step 1: Identification of Problem

The large number of Malaysian students studying overseas indicates that there is a paucity of extant institutions of higher learning in Malaysia to cater to the increasing number of secondary school graduates and rising demand for skilled manpower of business and industry. Those who are financially disadvantaged have to settle with the conditions of post-secondary-school life. The dearth of job opportunities for the unskilled can be counter productive to the country's goal of attaining balanced economic development, political stability, and national unity. This problem can also hamper the government's effort of eradicating poverty and becoming a fully developed nation by the year 2020.

### Step 2: Determination of Solution Requirements and Alternatives

In determining the solution to the problem, the following steps were taken: (1) a review of related literature, (2) visits to community colleges in Michigan, U.S.A., and interviews with their senior administrators pertaining to the organization, administration, and programs of community colleges, (3) survey to assess the perceptions of selected Malaysian educators, politicians, and businessmen pertaining to the need and usefulness of community colleges for Malaysia, and (4) an interview with the administrator of higher education of Malaysia.

### Step 3: Selection of Strategies and Tools

Collection of data was made through review of related literature, interviews and survey questionnaire to selected respondents as specified in Step 2.

### Step 4: Development of the Model

The model for the organization, administration, and programs for community colleges in Malaysia was developed. It covered the proposed philosophy, purposes, and recommendations for community colleges in Malaysia as specified in chapter 5 of the text.

### Step 5: Evaluation of Model

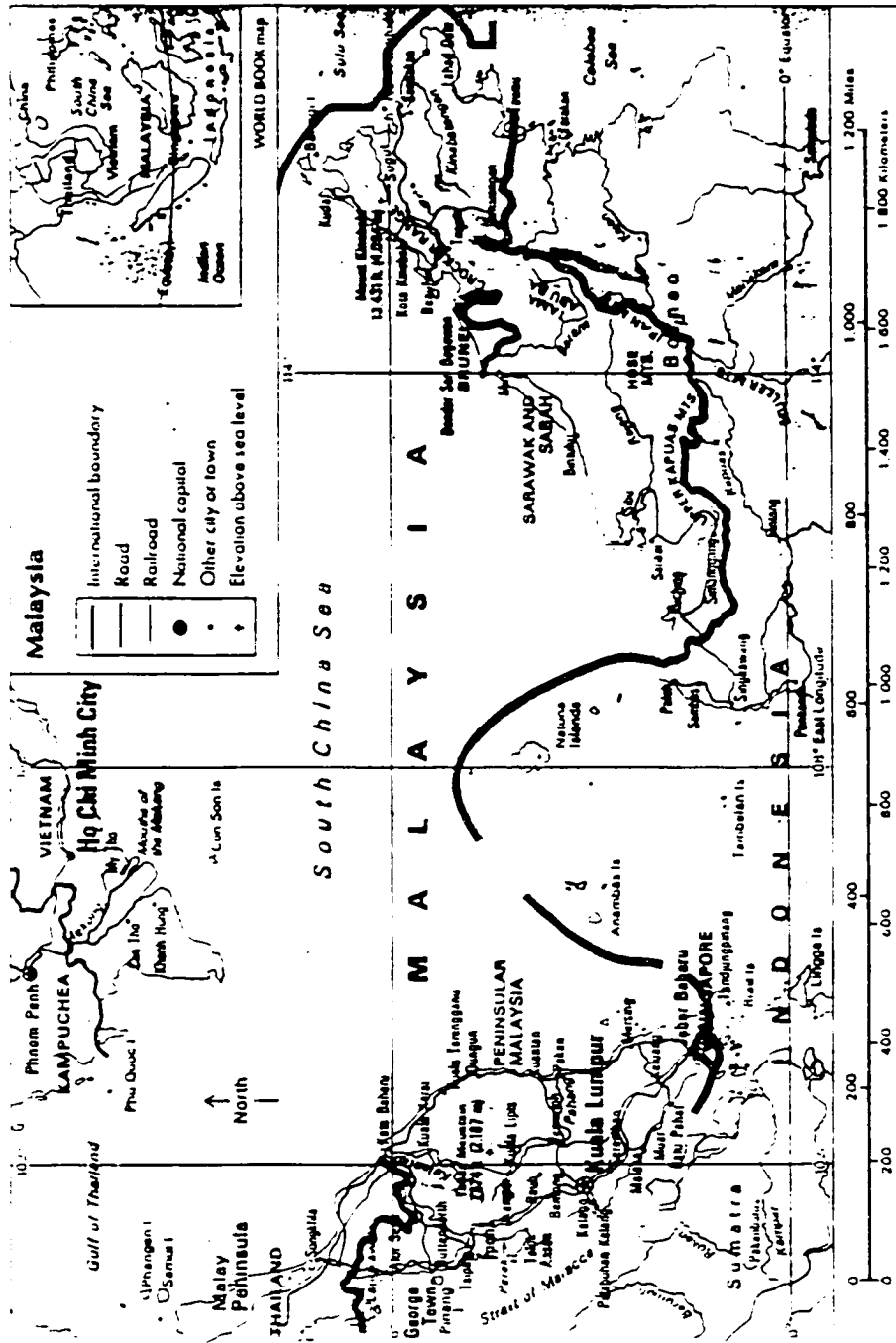
The model was sent to 5 experts in community colleges for evaluation. This panel of experts consisted of the president of Lake Michigan College, President of Southwestern Michigan College, Executive Vice President of Grand Rapids Community College, Vice President for Administration and Finance of Kellogg Community College, and Director of Admissions of Henry Ford Community College.

### Step 6: Revision of Model

Based on the comments of the panel of experts, revision of the model was made. Provisions were made for the roles of the community colleges to also serve as feeder institutions and to help in building communities. Page 249 of the text listed the other suggestions that were included in the revised model.

APPENDIX O

MAP OF MALAYSIA



Source: The World Book Encyclopedia. (1988). Malaysia.  
(Chicago: World Book Inc.) p. 100.

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